An abstract graphic featuring a network of overlapping lines in various colors (yellow, green, blue, red, orange) and nodes (black and white circles). Some nodes are connected by dashed lines, while others are solid. The lines radiate from several central points, creating a complex web-like pattern.

# Fiscal Year (FY) 2011–12 TRANSIT SYSTEM PERFORMANCE REPORT

Understanding the Region's Investments  
in Public Transportation



Transit/Rail Department



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**PHOTO CREDITS** SCAG would like to thank the following transit agencies:

- City of Santa Monica, Big Blue Bus
- City of Commerce Municipal Bus Lines
- Foothill Transit
- Los Angeles County Metropolitan Transportation Authority [Metro]
- Orange County Transportation Authority [OCTA]
- Omnitrans
- Victor Valley Transit Authority

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## SECTION 01

### Public Transportation in the SCAG Region



*Santa Monica's Big Blue Bus (BBB)*

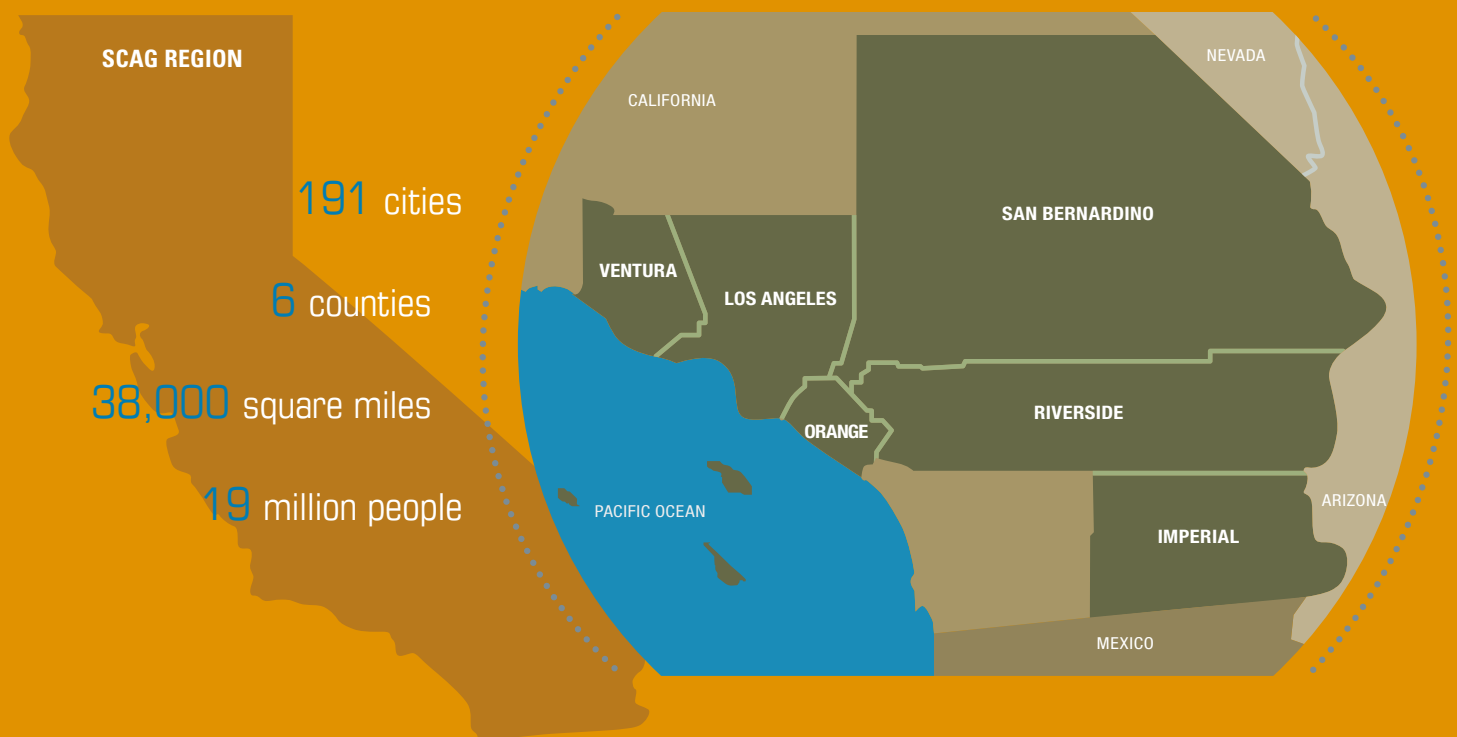


*City of Commerce Municipal Bus Lines (CBL)*

## INTRODUCTION

*The Southern California Association of Governments (SCAG) is the designated Metropolitan Planning Organization (MPO) representing six counties in Southern California: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG is responsible under state and federal law for preparing long-range transportation plans and transportation improvement programs through a performance-driven, outcome-based approach, and in cooperation with the public and stakeholders, including the State of California and public transportation operators. These plans and programs must provide for the development and integrated management and operation of transportation systems and facilities that will function as an intermodal transportation system for the federally designated metropolitan planning area and as an integral part of an intermodal transportation system for the state and the nation.*

*Public transportation, or transit, is a mobility strategy that allows travelers modal choice to reach their destinations, and provides mobility for residents without access to vehicles. Transit also represents a significant investment within the region's overall transportation system, composing roughly half (in combination with passenger rail) of all investments in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).*





## THE FEDERAL TRANSIT ACT OF 2012 DEFINES PUBLIC TRANSPORTATION AS:

Transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter, or intercity bus transportation or intercity passenger rail transportation provided by the entity described in chapter 243 (or a successor to such entity).<sup>1</sup>

The purpose of this report is to provide an incremental step towards producing a transit System Performance Report for the 2016 RTP/SCS, and to continue incorporating an annual review of system performance geared towards planning for operations and maintenance into SCAG's transit modal planning practices. There are four key factors this report addresses as an incremental step towards the 2016 RTP/SCS:

- Providing a framework for understanding the region's large and complex public transportation system, and analyzing its performance at that same level. This includes contextualizing public transportation's role in providing mobility within the region, addressing governance issues, and addressing the geographic distribution of service provision and consumption, in addition to addressing the growing role of rail transit and demand response services in the region
- Providing a resource that helps policy makers understand the nature and extent of the region's investments in public transportation, the kinds of returns those investments are delivering, and adding to the discussion regarding planning for

operations within the context of the production of the 2016 RTP/SCS

- Providing a benchmarking resource which providers of public transportation can use to compare their system's performance to that of comparable agencies
- Addressing new Metropolitan Planning provisions contained in Moving Ahead for Progress in the 21st Century (MAP-21), relating to the production of public transportation System Performance Reports in Regional Transportation Plans

This report is organized into three sections:

**SECTION 01 PUBLIC TRANSPORTATION IN THE SCAG REGION** discusses the types of transit provided in the region, how service provision is governed, transit's role in providing mobility, and the external benefits transit provides.

**SECTION 02 REGIONAL PERFORMANCE** analyzes transit performance at a regional level, addressing the system's productivity, the financial resources dedicated to the region's transit system, the geographic distribution of service provision and consumption for Fiscal Year 2011-2012 (FY 2011-12)<sup>1</sup>.

**SECTION 03 OPERATOR PROFILES** depicts the individual performance of each of the transit properties in the region that report data within the National Transit Database's urban operator's format.

Finally, the Appendices provide further detail regarding transit governance in the SCAG region and the development of the system performance measures used in this report.

<sup>1</sup> For purposes of this report, a fiscal year begins on July 1 and ends June 30 of the following calendar year.



### The 2012-2035 RTP/SCS

On April 4, 2012 SCAG's Regional Council adopted the 2012-2035 RTP/SCS, the culmination of a multi-year planning effort involving stakeholders from across the region. This plan laid forth the region's vision for mobility investments over a twenty- three year time span, and was the first to integrate a "Sustainable Communities Strategy" identifying "high quality transit corridors" for infill development, and advancing strategies for reducing regional greenhouse gas emissions.

As part of the analytical work comprising the production of the transit appendix to the 2012-2035 RTP/SCS, base year performance data were analyzed for 25 agencies providing inter-jurisdictional transit service in the SCAG Region.

### The 2010-11 System Performance Report

The 2010-11 Transit System Performance Report was SCAG's first effort at producing an annual format for measuring system performance. This effort included a review of the literature on transit performance measures (see Appendix B) which led to the selection of a discrete set of measures proposed to be used for the

annual reports (see Table 4). These measures were reviewed by the High Speed Rail and Transit Subcommittee of SCAG's Transportation Committee, and by the Regional Transit Technical Advisory Committee.

### Defining Public Transportation

The Federal Transit Act of 2012 defines public transportation as:

"Transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter, or intercity bus transportation or intercity passenger rail transportation provided by the entity described in chapter 243 (or a successor to such entity)i."

As amended by MAP-21, 49 US Code Section 5302, further defines public transportation as:

"[14] PUBLIC TRANSPORTATION.—The term 'public transportation'—

(A) means regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income; and

(B) does not include—

(i) intercity passenger rail transportation provided by the entity described in chapter 243 (or a successor to such entity);

(ii) intercity bus service;

(iii) charter bus service; (iv) school bus service; (v) sightseeing service;

(vi) courtesy shuttle service for patrons of one or more specific establishments; or

(vii) intra-terminal or intra-facility shuttle services."

It is important to note that per the federal definition of transit, and for the sake of this report, services such as intercity passenger transportation, high speed rail, university or workplace shuttles, school buses, or tourism based services do not qualify as public transportation and will not be considered here. Further, since the performance of the Southern California Regional Rail Authority's Metrolink service was analyzed in SCAG's *2013 Rail System Performance Report*, its individual performance will not be analyzed here in any depth.

The transit system in the six-county SCAG Region is comprised of an extensive network of services provided by dozens of operators. The network includes fixed-route local bus, community circulators, express bus, bus rapid transit (BRT), demand response, commuter rail, heavy rail, and light rail. The modal categories used in this report, along with definitions provided by the National Transit Database, are illustrated in Figure 1.

## TRANSIT AND MOBILITY IN THE SCAG REGION

### Transit and Mobility

As of the beginning of FY 2011-12, our region's transit system consisted of approximately 9,000 miles of bus routes and 70 miles of heavy and light rail, in addition to 388 miles route miles of rail utilized by Metrolink. Almost 5% of travelers in the SCAG Region used transit to reach their destinations in 2009. According to data reported to the National Transit Database, transit agencies in the SCAG Region experienced 716 million boardings and invested \$2.45 billion in operations and maintenance in FY 2011-12.

FY2011-12 also saw the opening of a new light rail line in Los Angeles County, the Metro Expo Line (Line 806). The initial operating segment of the Expo Line opened April 28, 2012, serving an 8.6 mile corridor

**FIGURE 1 Public Transit Modes in the SCAG Region**

#### FIXED ROUTE BUS SERVICE

Defined as "a transit mode comprised of rubber tired vehicles operating on fixed routes and schedules over roadways" (referred to as Motor Bus in the National Transit Database).



#### DEMAND RESPONSE

Defined as "a transit mode comprised of passenger cars, vans, or small buses operating in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations."



#### COMMUTER RAIL

Defined as "a transit mode that is an electric or diesel propelled railway for urban passenger train service operating between a central city and suburbs. Service must be operated on a regular basis...for the purpose of transporting passengers within urbanized areas (UZAs), or between urbanized areas and outlying areas."



#### HEAVY RAIL

Defined as "a transit mode that is an electric railway with the capacity for a heavy volume of traffic. It is characterized by separate right-of-ways (ROWS) from which all other vehicular and foot traffic are excluded and high speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails."



#### LIGHT RAIL

Defined as "a transit mode that typically is an electric railway with a light volume traffic capacity compared to heavy rail (HR). It is characterized by passenger rail cars operating on fixed rails in shared or exclusive ROW and vehicle power drawn from an overhead electric line via a trolley or a pantograph."





**TABLE 1 Total Trips by County, All Purposes**

Total Trips				
County	Auto	Transit	Bicycle	Walk
Imperial	114,018,194	Not available	318,631	10,361,556
Los Angeles	6,231,994,828	400,196,991	166,397,229	2,083,153,592
Orange	2,180,289,337	67,656,250	39,874,041	388,410,530
Riverside	1,272,756,998	17,577,906	21,621,490	214,696,550
San Bernardino	1,434,093,895	26,259,261	21,761,307	230,494,820
Ventura	477,831,965	6,490,657	15,518,240	79,642,547
<b>TOTAL</b>	<b>11,710,985,217</b>	<b>518,181,065</b>	<b>265,490,938</b>	<b>3,006,759,595</b>

Percentage of Trips				
County	Auto	Transit	Bicycle	Walk
Imperial	90.49%	Not available	0.25%	8.22%
Los Angeles	69.65%	4.47%	1.86%	23.28%
Orange	80.76%	2.51%	1.48%	14.39%
Riverside	82.60%	1.14%	1.40%	13.93%
San Bernardino	83.21%	1.52%	1.26%	13.37%
Ventura	81.49%	1.11%	2.65%	13.58%
<b>SCAG REGION</b>	<b>74.96%</b>	<b>3.32%</b>	<b>1.70%</b>	<b>19.24%</b>

Source: National Household Travel Survey 2009<sup>iii</sup>

from 7th Street Metro Center/Julian Dixon to La Cienega Blvd. Additional stations at Culver Blvd and Farmdale Ave opened on June 20, 2012. The Expo Line provided almost 600,000 trips and 2.2 million passenger miles in FY2011-12, with a weekday average of 13,897 trips and 51,141 passenger miles.<sup>ii</sup>

Table 1 illustrates transit's role in terms of total travel in the SCAG Region. These data, which were obtained from the Federal Highway Administration's 2009 National Household Travel Survey, represent a sample of all travel in the region, regardless of time, length, or duration. Transit's overall role is comparatively small, but serves an important role in providing modal choice.

Transit is particularly important for commute trips, which tend to occur during peak congestion periods.

**FY 2011-12** saw the opening of the Metro Expo Line, an 8.6 mile corridor connecting Culver City with the region's rail system, and providing 600,000 trips in its first year of operation.

Table 2 presents Journey to Work data obtained from the US Census's 2009-2011 American Community Survey 3-Year Estimates. These data demonstrate that the overall mode share for transit is much higher for commute trips than overall trips. Los Angeles

TABLE 2 Journey to Work by County

2011 3 year ACS Estimates	Imperial County	Los Angeles County	Orange County	Riverside County	San Bernardino County	Ventura County
<b>Workers 16 years and over</b>	57,099	4,327,711	1,400,804	838,422	782,989	378,846
<b>MEANS OF TRANSPORTATION TO WORK</b>						
<b>Car, truck, or van</b>	90.2%	83.0%	88.2%	90.0%	91.0%	89.1%
<b>Drove alone</b>	78.9%	72.2%	78.1%	77.1%	74.4%	75.9%
<b>Carpooled</b>	11.3%	10.8%	10.0%	13.0%	16.7%	13.2%
In 2-person carpool	7.9%	8.4%	7.7%	9.6%	13.2%	9.7%
In 3-person carpool	1.7%	1.5%	1.3%	1.9%	2.0%	1.7%
In 4-or-more person carpool	1.8%	1.0%	0.9%	1.5%	1.5%	1.8%
<b>Workers per car, truck, or van</b>	1.08	1.08	1.07	1.09	1.11	1.09
<b>Public transportation</b>	<b>1.5%</b>	<b>7.2%</b>	<b>2.9%</b>	<b>1.5%</b>	<b>1.9%</b>	<b>1.4%</b>
<b>Walked</b>	2.0%	2.9%	2.0%	1.6%	2.0%	2.3%
<b>Bicycle</b>	0.5%	0.8%	1.0%	0.4%	0.4%	0.8%
<b>Taxicab, motorcycle, or other means</b>	1.3%	1.2%	1.0%	1.4%	1.0%	1.0%
<b>Worked at home</b>	4.5%	4.9%	5.0%	5.1%	3.7%	5.5%

Source: American Community Survey, 2011

County has a particularly high transit commute mode share – 7.2% of all work trips, which compares favorably with the state share of 5.2% and the national share of 5%.<sup>iv</sup>

The other counties of the region are well below both the state and federal averages with respect to transit mode share. However, it should be noted that given the sheer size of the SCAG region, it still remains one of the largest transit markets in the country. Orange County's commute mode share may only be 2.9%, but OCTA still ranks among the APTA's 50 largest providers of public transportation.

### Transit Dependency

Transit plays an important role in providing mobility and modal choice in the SCAG Region, but also helps to provide mobility for households or travelers with no or limited access to vehicles. Table 3 displays five year estimates of vehicles available by household, as reported by the U.S. Census's American Community Survey. One out of ten households in Imperial and Los Angeles Counties have no vehicles available, and about 1/4 to 1/3 of households in all counties have only one vehicle available. Public transportation remains an effective way of providing mobility options

**TABLE 3 Vehicles Available by Household**

Vehicles Available by Household	Imperial County	Los Angeles County	Orange County	Riverside County	San Bernardino County	Ventura County
<b>No vehicles available</b>	11%	10%	5%	5%	5%	5%
<b>1 vehicle available</b>	31%	35%	29%	30%	28%	26%
<b>2 vehicles available</b>	35%	35%	42%	39%	38%	41%
<b>3 or more vehicles available</b>	23%	20%	25%	26%	29%	29%

Source: American Community Survey, 2011

for those households<sup>v</sup>.

As noted in the Brookings Institution Report, “Transit Access and Zero Vehicle Households,” the SCAG Region contains three of the 100 Metropolitan Statistical Areas (MSAs) with the largest concentrations of zero vehicle households. As the second largest MSA in the country, it is not surprising that the Los Angeles-Long Beach-Santa Ana<sup>2</sup> MSA has the third largest number of zero car households, behind New York - Northern New Jersey-Long Island NY-NJ-PA, and Chicago-Naperville-Joliet IL-IN-WI. The 358,705 zero car households represent almost 5% of the national total, and are almost as much as the combined total of the San Francisco-Oakland-Fremont CA and Washington-Arlington-Alexandria DC-VA-MD-MV MSAs<sup>vi</sup>.

The Riverside-San Bernardino-Ontario CA and Oxnard-Thousand Oaks-Ventura, CA MSAs are also represented within the index, with 65,862 and 10,200 households, respectively. These two areas both rank within the bottom quintile for share of jobs accessible via transit within 90 minutes, while Los Angeles-Long Beach-Santa Ana ranks within the middle quintile

[Riverside-San Bernardino-Ontario ranks 99 out of 100, and Oxnard-Thousand Oaks-Ventura ranks 85]. Ninety-nine percent of zero vehicle households within Los Angeles-Long Beach-Santa Ana have access to some sort of public transportation, while 87% of Riverside-San Bernardino-Ontario households and 91% of Oxnard-Thousand Oaks-Ventura households do.

### External Benefits of Transit Use

Transit use also provides external benefits to the region's transportation system, through investment, reduced traffic congestion, and air pollution emissions reductions. APTA estimates that for every billion dollars invested in transit (as of 2007) approximately

**THE SCAG REGION** contains three of the 100 Metropolitan Statistical Areas (MSAs) with the largest concentrations of zero vehicle households

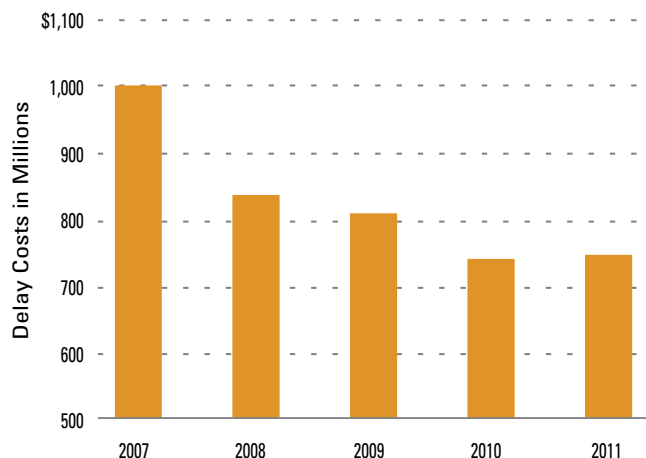
**358,705** LA-LB-SA MSA is the **3RD HIGHEST IN THE NATION**

**65,862** Riverside-San Bernardino-Ontario

**10,200** Oxnard-Thousand Oaks-Ventura

*Transit Access and Zero Vehicle Households, 2011*

<sup>2</sup> This MSA's name was changed per the 2010 US Census Boundaries to Los Angeles - Long Beach - Anaheim CA

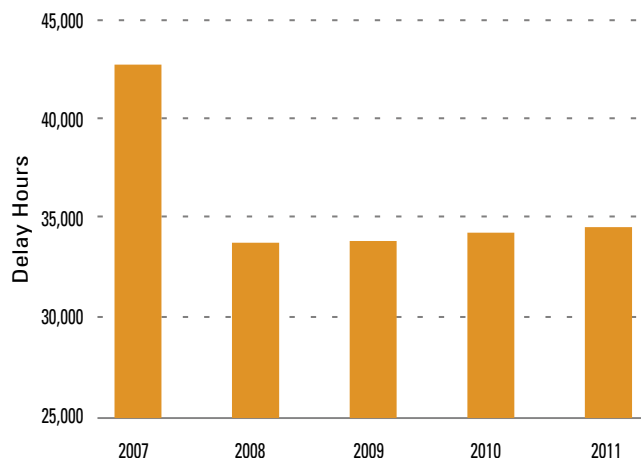
**FIGURE 2 Annual Delay Costs Averted by Public Transit, Medium and Large UZAs**

Source: TTI 2012

36,000 jobs are created. This includes the direct purchasing power of transit agencies, and also the spending power of the employees of transit agencies<sup>vii</sup>. Were this rate to have held constant into FY 2011-12, transit spending in the SCAG Region would have resulted in the creation or maintenance of roughly 150,000 jobs.

Similar studies by APTA have concluded that compact, transit friendly communities have a per capita transit fatality rate roughly 25% that of auto dependent communities, and have less severe traffic collisions. Further, as the market share for cleaner transit fuels has reached 30.4% nationally, the per passenger mile air pollution emissions profile of transit has decreased significantly, especially regarding diesel particulate, oxides of nitrogen, and hydrocarbons<sup>viii</sup>.

The Texas Transportation Institute (TTI), in its annual Urban Mobility Report, estimates traffic congestion delay averted due to the use of the region's public transportation system. Figures 3-5 are charts tracking

**FIGURE 3 Aggregate Delay Hours Averted by Public Transit, Medium and Large UZAs**

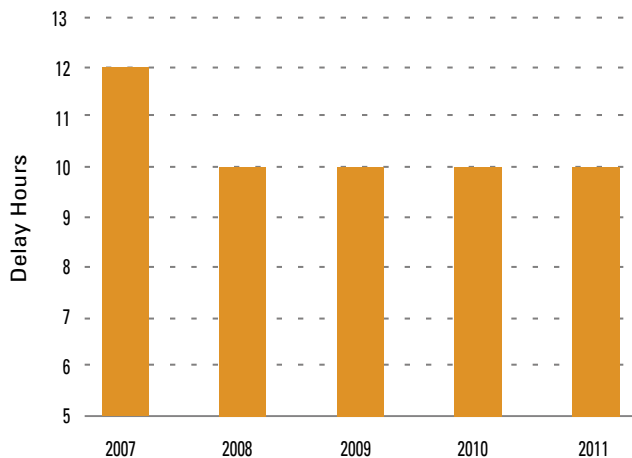
Source: TTI 2012

the amount of delay averted in aggregate hours, per capita hours, and monetized costs avoided via public transit usage in the Indio- Cathedral City-Palm Springs CA, Lancaster-Palmdale CA, Los Angeles-Long Beach-Santa Ana CA, Oxnard CA, and Riverside-San Bernardino CA urbanized areas (UZAs).

As discussed in chapter 5 of the 2012-2035 RTP/SCS, delay is a commonly used measure of mobility, often defined as the difference between actual travel time and the travel time at a predefined "optimal speed" for the mode being considered. For the purposes of the TTI report, the delay in question relates to auto travel, measured in Vehicle Hours of Delay.

As displayed in Figure 2 significant externalized costs of auto operation are avoided in the SCAG Region due to travelers choosing transit instead of driving. During the economic boom year of 2007, these cost savings totaled nearly one billion dollars. These estimated savings are especially significant when compared to total congestion related costs, estimated to be over

**FIGURE 4 Per Capita Delay Hours Averted by Public Transit**



Source: TTI 2012

\$14 billion for the SCAG Region in 2007. The impact of the recession of 2008-2009, and subsequent service cuts, can be seen as the cost savings diminish in the 2008-2011 period<sup>ix</sup>.

Similarly, Figure 3 outlines the aggregated hours of delay averted by travelers who choose to use transit instead of driving. In 2007, transit riders averted a total of almost 45,000 delay hours by not using road facilities. As the economy worsened, the delay benefits decreased significantly. However, transit's delay reducing impacts will be greatest when demand for road-space is greatest. This would imply that when the economy recovers to pre-2008 levels, so will transit's delay reduction benefits.

Figure 4 displays transit's delay reduction benefit on a per capita basis. Transit riders in the SCAG Region saved residents roughly ten hours in delay averted in 2011.

### National Transit Database (NTD)

All of the data analyzed in this report were obtained from the NTD. Data reported to NTD by transit agencies allow for analysis to be conducted most easily at the agency level. NTD data is not an effective tool for measuring service as it is experienced by the passenger. The NTD was established by Congress to be the nation's primary source for information and statistics on its transit systems. Recipients or beneficiaries of grants from the FTA under the Urbanized Area Formula Program [§5307] or Other than Urbanized Area [Rural] Formula Program [§5311] are required by statute to submit data to the NTD. Over 660 transit providers in urbanized areas annually report performance data to the NTD. These data are used to apportion over \$5 billion of FTA funds to transit agencies in urbanized areas [UZAs]. Annual NTD reports are submitted to Congress summarizing transit service and safety data.

The legislative requirement for the NTD is found in Title 49 U.S.C. 5335[a]. NTD data for the SCAG Region include annual operations and financial reports dating back to 1991, and monthly non-audited operations reports dating back to 2002.

Year to year changes in NTD reporting mandates can affect the data used in performance measurement. As directed by congress or through various rulemaking processes, agencies may be required to report new types of data to the NTD. Within the past two years, NTD has established several new reporting modes, including Commuter Bus and Rapid Bus, which affect the way the day is analyzed. Where appropriate these modes are specifically called out, and in other cases the data are subsumed into the Motor Bus mode to maintain the time series.



## Transit Performance Measures

A brief discussion of the measures used in this report is contained below. A richer discussion is contained in Appendix A.

The measures selected for this report are concerned with two levels of analysis, the regional level and the agency level. Section 02 of the report is concerned with the regional level and Section 03 with the agency level.

Section 02 of the report focuses on services provided and consumed, the changing ways passengers are using transit in the region, how transit is paid for, and the changing geographic distribution of transit demand. The key measures employed are ridership, passenger miles, total costs and fund sources, mode shares, and productivity.

The performance measures used in Section 03 are shown in Table 4. These measures focus on travel time, maintenance, and economic categories – particularly cost effectiveness and cost efficiency.

Cost efficiency measures evaluate the ability of an agency to provide service given existing funding constraints, without examining the consumption of service. These measures simply demonstrate the ability of an agency to provide outputs of transit service (revenue hours, revenue miles) given certain inputs (labor, operating expenses). These measures are used by most transit agencies to track system performance.

Cost effectiveness measures assess both supply and demand. How well is a system meeting community

**TABLE 4 Performance Measures Used in Section 03**

Performance Concept	Performance Measure
Economics/Cost Efficiency	<b>Operating Cost per Vehicle Revenue Hour</b>
Economics/Cost Effectiveness	<b>Farebox Recovery</b>
	<b>Operating Cost per Passenger Trip</b>
	<b>Operating Cost per Passenger Mile</b>
Service Effectiveness/Productivity	<b>Passengers per Vehicle Revenue Hour</b>
	<b>Passengers per Vehicle Revenue Mile</b>
Maintenance	<b>Fleet Average Vehicle Age</b>
Mobility/Travel Time	<b>Average Vehicle Speed</b>

demand for transit service, within existing financial constraints? Given the demand side characteristics of these measures, they more clearly represent the individual conditions of any particular service area, since transit demand varies widely over space. These measures are therefore less useful for inter-agency benchmarking than cost efficiency measures.

The ratio of passenger volume to service provided forms the basis for most productivity measures. Typically measured in passengers per hour or per mile, these figures are affected by demand, service area size and characteristics, vehicle speeds, and the amount of service provided.

Maintenance measures analyze the state of an agency's capital stock, and the effectiveness of its maintenance programs. Fleet average vehicle age measures the age of an agency's fleet, and allows for medium term planning assumptions about maintenance and vehicle replacement needs. These data are reported in fleet average age in years in this resource.

Mobility, the ability of travelers to move between a variety of origins and destinations, is one of the key goals of regional planning at SCAG. The average speed at which a transit vehicle moves is a useful proxy variable for travel time, a component of mobility. While this variable does not compare travel speeds to other modes, or assess individual trip times, it does assess the impact of congestion, route directness, dwell and boarding/alighting times, signal times, and other variables on providing relatively quick transit trips.



## SECTION 02

### Evaluating Transit System Performance



Foothill Transit



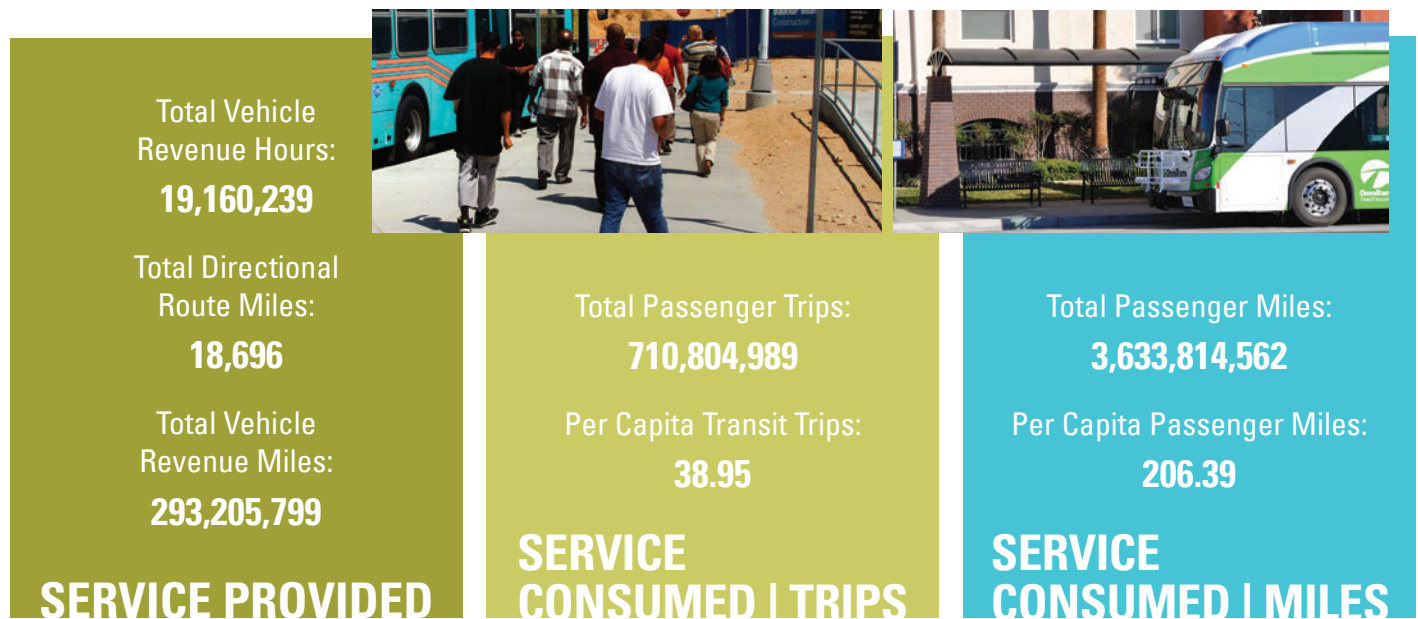
Orange County Transportation Authority (OCTA)

## INTRODUCTION

*Over the past two decades, MPOs across the country have been moving toward the implementation of Performance Based Planning and Programming (PBPP), an analytical strategy focused on assessing the ability of plans, programs, and individual projects to advance the adopted goals and objectives of MPO policy boards, as they relate to transportation system improvement. More information about PBPP can be found in Appendix B.*

*A key practice in PBPP is the episodic monitoring of a system's performance. This is the key manner by which MPOs and other agencies can assess the extent to which their strategies and investments are having the desired impacts on transportation system performance. Section 2 of this report, "Evaluating Transit System Performance" is SCAG Transit and Rail Department's effort to monitor, evaluate, and report on the Region's investments in public transportation.*

*The key measures in this section have been vetted with stakeholders at the Regional Transit Technical Advisory Committee, and were reviewed by the High Speed Rail and Transit Subcommittee.*

**FIGURE 5 Characteristics of Transit Service in SCAG Region: Service Provision and Consumption in FY 2011-12**

As discussed in Section 01, the 2012-2035 RTP/SCS contained an analysis of transit performance trends in FY 2007-08 and FY 2008-09, and the subsequent FY2010-11 Transit System Performance Report focused on analyzing that year's performance. One key finding of these efforts was that the years between FY 2008-09 and FY 2011-12 were a period of austerity and downsizing for households and employers in the region, and subsequently also for transit agencies. This austerity was the product of the Recession of 2008-09, and led to cuts in service and dropping demand.

As reported in the FY2010-11 Transit System Performance Report in Figures 5 and 6, the 703.6 million trips reported in FY2010-11 represent were a 6% decrease from the FY2008-09 data point, and per capita trips have fallen from a high of over 42 in 2005-2006 to 38.8 in 2011-2012.

Figure 5 demonstrates basic service provision and consumption measures for the region, as obtained from the NTD's 2012 data.

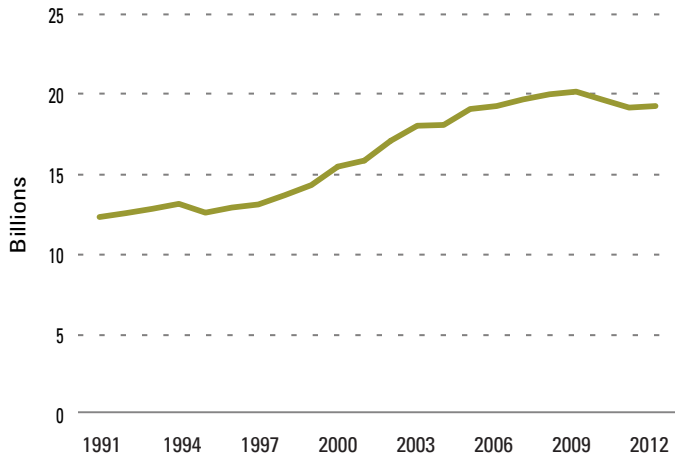
In Fiscal Year 2011-12, the region's transit agencies provided just over 19 million hours of bus, rail and demand response transit service, along 18,696 directional miles of routes. This service level along these routes combined to just under 300 million vehicle revenue miles of service. Passengers in the region took just under 711 million unlinked passenger trips on those bus, rail, and demand response services, and travelled just over 3.6 billion miles on those services.

#### **Service Provided and Consumed: 20 Year Trends**

National Transit Database data provides an opportunity to construct timeseries dating back to 1991. Given that this period contains the enactment of the Americans with Disabilities Act and the onset of Metrolink and Metro Rail service in the SCAG Region, it is helpful to look at this timeseries in order to understand the changing nature of transit service provision and consumption in the SCAG Region. Total service hours have grown by roughly 60% since 1991, but that growth has stagnated since the recession of 2008-2009.

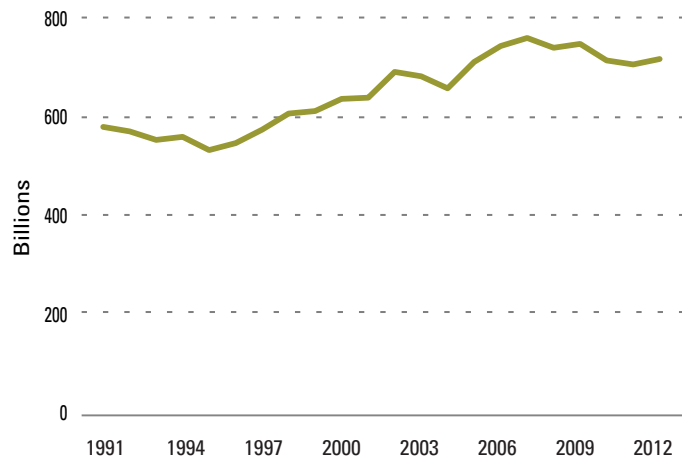


**FIGURE 6 Total Service Hours**



Source: NTD 2012

**FIGURE 7 Total Boardings**



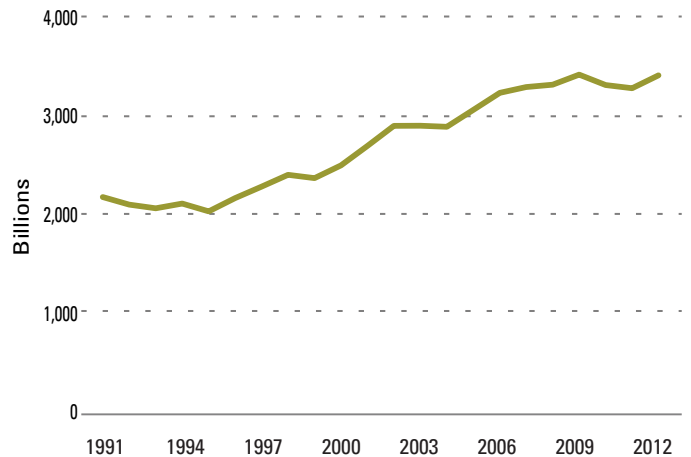
Source: NTD 2012

**FIGURE 8 Per Capita Trips**



Source: California Department of Finance 2013, NTD 2012

**FIGURE 9 Total Passenger Miles**



Source: NTD 2012

Total transit boardings have grown by about 26% since 1991, but are roughly 6% below their high point in 2008. As noted above, service cuts and the economic recession have had negative effects on ridership. FY2011-12 represents an annual uptick in

ridership, a growth of 1.7% total trips taken, and .3% per capita trips. This gain is still 7.2% below the pre-recession high of 42 per capita trips.

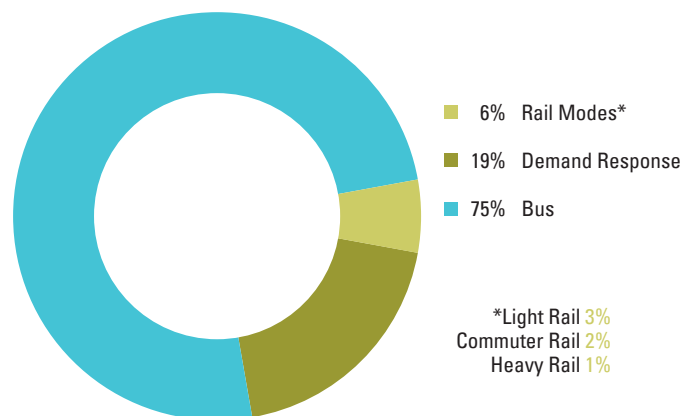
The use of per capita transit trips as a measure of regional performance has a long history at SCAG,

**FIGURE 10 Per Capita Passenger Miles Travelled**

Source: NTD 2012

**PER CAPITA TRIPS** are a key transit performance measure at SCAG, as selected by TC and our transit stakeholders. Per Capita trips help us to understand changes to transit demand in light of population growth.

dating back to the 2001 RTP. The Transit appendices to the 2001 and 2004 RTPs spells out the region's per capita trip performance targets, as endorsed by the Regional Transit Task Force (RTTF) and Transportation and Communications Committee (TCC). This goal was 34.9 trips per year, a figure that is being slightly exceeded in FY2011-12. However, that goal was enacted in light of the drastic drop in per capita transit trips in the mid-1990s, and represented the 1997 total. The TCC and RTTF hoped to stabilize and maintain total per capita transit trips, and this goal has been achieved.

**FIGURE 11 Share of Total Vehicle Revenue Hours by Mode, FY 2011-12**

Source: NTD 2012

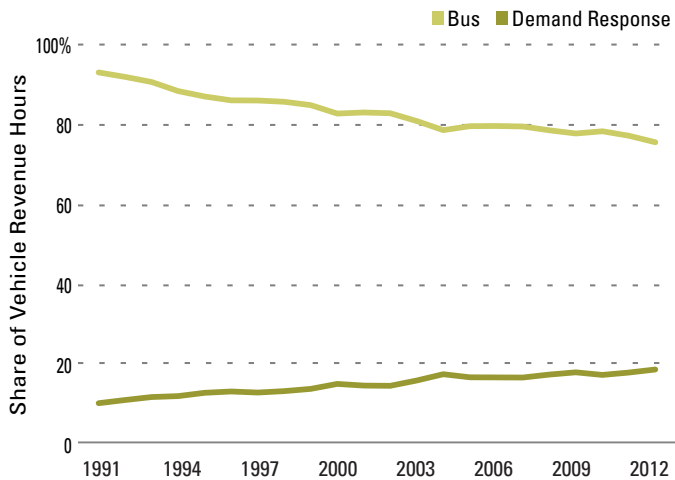
The region's pattern of service provision has changed drastically in the past 20 years, as rail and demand response transportation have become a much greater focus of regional transit provision. Metro Rail, which provided only 4% of all vehicle revenue hours in 2012, accounted for 13% of all operating expenses and carried roughly 14.3% of all trips.

Annual per capita passenger miles do appear to be growing though, suggesting a long term pattern to towards longer transit trips.

### Changing Patterns of Service Provision

As shown in Figure 11, the share of vehicle revenue hours devoted to demand response has doubled, from 8.6% in 1991 to 19.1% in 2012. Similarly, the share of operating expenses devoted to demand response also doubled, from 5% to 10% over the same period, as shown in Figure 16 on page 19 of this report.

The split of passenger miles travelled by mode has also changed drastically over the past 20 years. In 1991, 99% of passenger miles were provided by bus,

**FIGURE 12 Modal Share of Service Provided in SCAG Region**

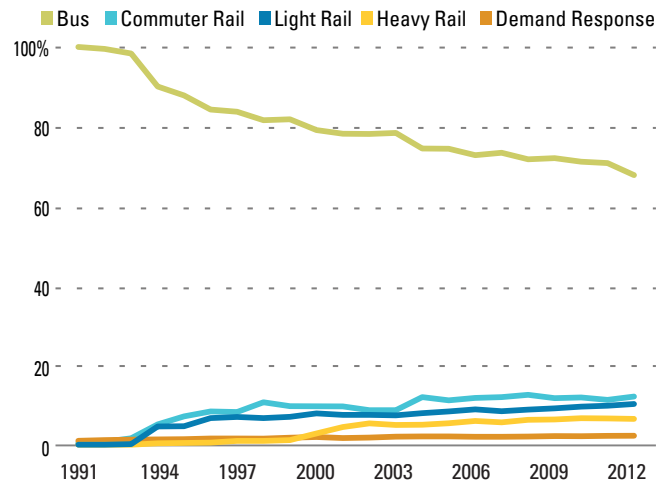
Source: NTD 2012

**TABLE 6 Characteristics of Transit Operating Expenditures in SCAG Region**

SCAG Region FY 11-12: Operating Costs and Revenues from NTD	
<b>Total Operating Expenditures</b>	<b>\$2,440,939,897</b>
Vehicle Operations Costs	\$1,348,570,441
Vehicle Maintenance	\$460,565,064
Non Vehicle Maintenance	\$162,374,398
General Administration	\$469,429,994
<b>Fare Box Revenues</b>	<b>\$638,174,478</b>

Source: NTD 2012

whereas in 2012 only 69% were. By 2012, Metro Rail accounted for 16% of all passenger miles, and commuter rail for 12%, with demand response accounting for 2% of all passenger miles.

**FIGURE 13 Modal Share of Passenger Miles**

Source: NTD 2012

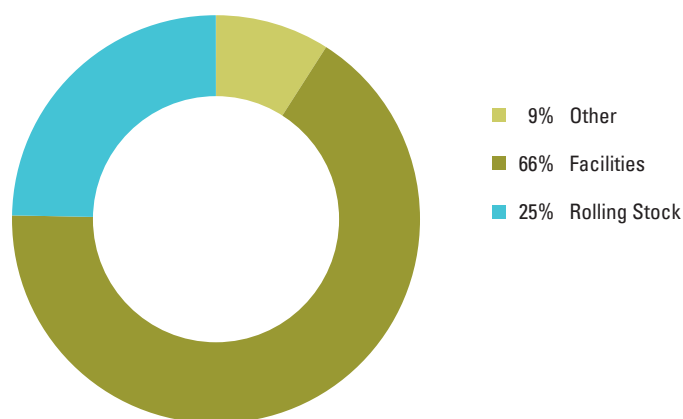
## SYSTEM LEVEL MEASURES: REVENUES AND COSTS

Cost effectiveness and efficiency are important measures for understanding the performance of transit. Transit capital and operations and maintenance costs total roughly half of the investments in the 2012-2035 RTP/SCS. The annual operating costs of transit service in the SCAG Region are significant. In FY 2011-12, operating costs totaled just over \$2.4 billion and capital investments were just over \$1.1 billion.

Figure 14, on the next page, details the proportions of capital funds spent on facilities and the proportions spent on vehicles. According to APTA, in 2007 the nation spent roughly 27% of its transit capital funds on vehicle acquisition, and roughly 73% on the development of facilities, implying that the region is keeping pace with national trends.

### Historical Investments

Since 1992, transit agencies have spent \$14.67 Billion in 2012 dollars on capital investments: 36% for

**FIGURE 14 Transit Capital Expenditures in SCAG Region, FY 2011-12**

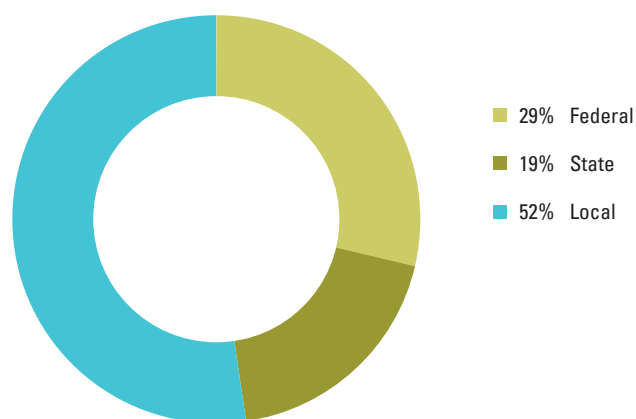
Source: NTD 2012

Rolling Stock, 48% for Facilities, including passenger stations, guideways, administration buildings, and maintenance buildings, and 15% for other expenses, including purchased transportation services, communications-information systems, and fare collection equipment.

In the period since 1991, transit agencies have spent a further \$42.898 Billion (2012 dollars) on Operations and Maintenance expenses. Almost 78% of those expenses have been for fixed route bus service, almost 6% each for Light Rail and Commuter Rail, 8% for Demand Response, and 3.3% for Heavy Rail.

### Projected Investments

Projections from the 2012-2035 RTP/SCS Financial Model indicate significant continued spending on transit. The SCAG Cost model identifies a total cost of \$139.3 billion for the Region's transit Operation and Maintenance [O&M] and system preservation goals, including O&M expenses for existing services, service expansions, major new capital investments, and

**FIGURE 15 Sources of Capital Funds, FY 2011-12**

Source: NTD 2012

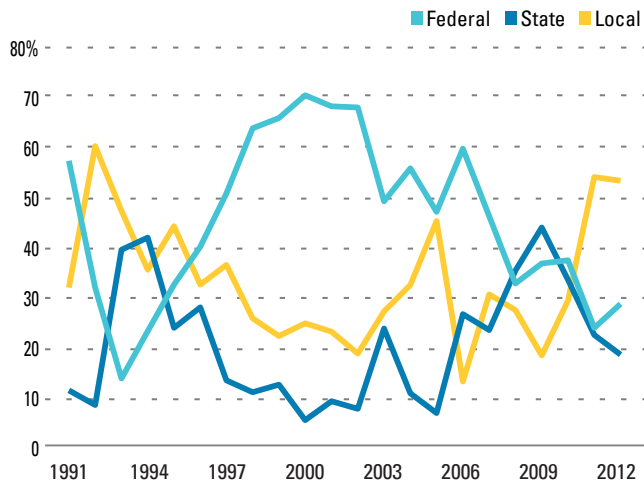
system preservation investments. Transit O&M and system preservation accounts for 64.2% of the Multimodal System Preservation and Maintenance Needs identified in the 2011 Cost Model.

The 2012-2035 RTP/SCS also budgets roughly \$55 Billion for transit capital investments, and another \$57.8 Billion for Intercity Passenger Rail and High Speed Rail capital.

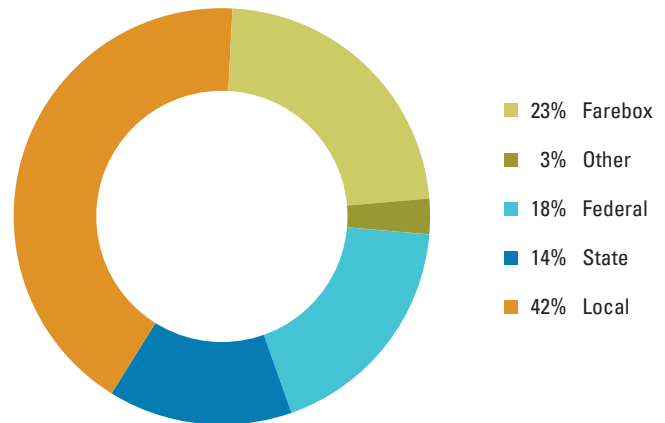
### Fund Sources

As of FY 2011-12, local funding makes up just over half of all transit capital funds in the SCAG Region. This is consistent with the national trend of diminishing federal shares in transportation funding. However, it should also be noted that one reason the SCAG Region is able to fund nearly half its capital budget locally is the success of local option sales taxes for transportation. Five of the six counties in the SCAG Region are self-help counties, and Los Angeles County has passed a total of three sales tax measures.

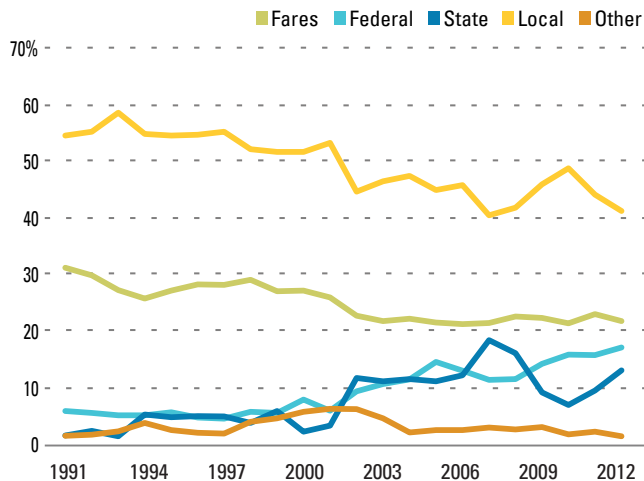
As demonstrated in Figure 16, from 1998 to 2003 well

**FIGURE 16 Transit Capital Fund Sources**

Source: NTD 2012

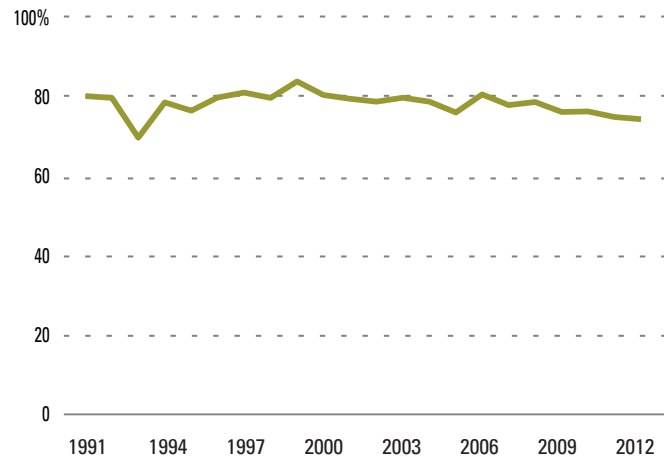
**FIGURE 17 Sources of Operations Revenues, FY 2011-12**

Source: NTD 2012

**FIGURE 18 Trends in Operating Funding**

Source: NTD 2012

over 60% of all capital revenues were federal. This period coincides with Metro Red Line extensions to Hollywood and the San Fernando Valley, and demonstrates the importance of the region's ability to compete for federal resources. The precipitous decline in state revenues between 2008 and 2012 coincides

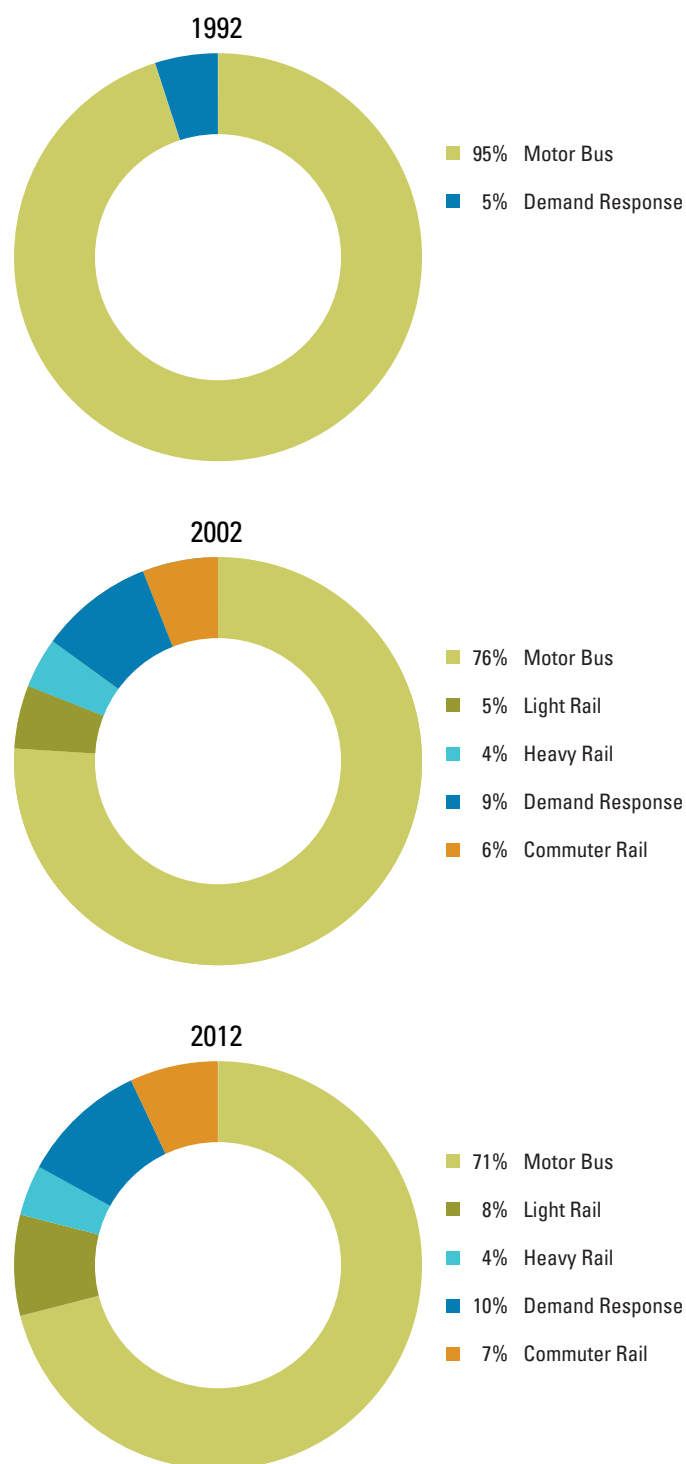
**FIGURE 19 Operations Revenues as a Share of All Revenues**

Source: NTD 2012

with declines in Local Transportation Fund (LTF) revenues as documented in the Transit Appendix of the 2012-2035 RTP/SCS.

Figure 17 displays total FY 2011-12 O&M funding for the region's transit properties. In FY 2011-12 only 32%



**FIGURE 20 Operating Expenses by Mode**

Source: NTD 2012

of transit O&M revenues were generated outside the region, with the remaining coming from farebox revenues or other local sources. The 20 year trend for O&M funding is more stable than for capital funding, reflecting the federal government's reluctance to directly support operations in urbanized areas in the post- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) era. Declining state revenues in recent years reflect similar trends as declining capital funds.

The importance of LTF funds to transit agencies operating budgets is demonstrated in Figure 18. As state revenues grew beginning in 2000, local monies were freed up for other uses. However, decreases in state funds between 2007 and 2012 have meant that local funds are increasingly important, in addition to causing many operators to cut service.

### Operating Expenses by Transit Mode

Figure 20 demonstrates the splits among modes in terms of O&M spending. The region's increasing financial commitment to rail transit and demand response is evident in the period between 1992 and 2012, as total spending on rail and demand response modes grew from 5% in 1992, to 23% in 2002, and to 29% in 2012.

### METHOD OF SERVICE PROVISION

Public transportation services are provided via services operated directly or by services agencies purchased from a third party provider. According to APTA's *2013 Public Transportation Fact Book*, purchased transportation expenses make up about 13.3% of the nation's total operations spending<sup>x</sup>. Nationally, 57% of purchased transportation expenses are for demand response transit, and 39% are for fixed route services<sup>xi</sup>.

The NTD defines directly operated service and purchased transportation as follows:

**TABLE 7 Service Provision in the SCAG Region**

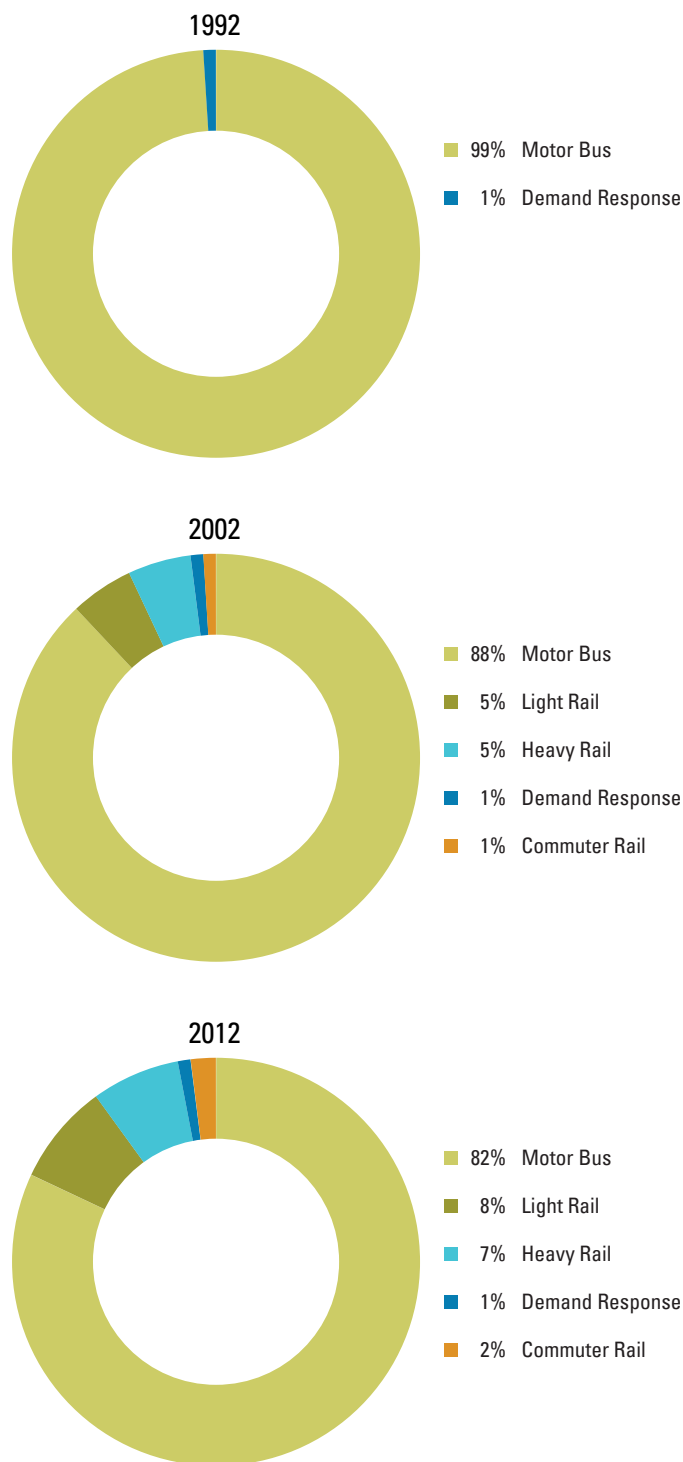
	Total Service Hours	Total Trips	Passengers per Hour	Median Cost per Trip
<b>Demand Response Directly Operated</b>	136,381	390,662	2.86	\$34.28
<b>Demand Response Purchased Transportation</b>	3,528,139	7,911,168	2.24	\$26.64
<b>Percentage Directly Operated</b>	4%	5%	-	-
<b>Percentage of Service Operated Directly</b>	76%	85%	-	-
<b>Motor Bus Directly Operated</b>	10,766,892	491,829,101	45.68	\$3.48
<b>Motor Bus Purchased Transportation</b>	3,393,453	85,625,669	25.23	\$5.09

- **DIRECTLY OPERATED (DO)** Transportation service provided directly by a transit agency, using their employees to supply the necessary labor to operate the revenue vehicles. This includes instances where an agency's employees provide purchased transportation (PT) services to the agency through a contractual agreement.
- **PURCHASED TRANSPORTATION (PT):** Transportation service provided to a public transit agency or governmental unit from a public or private transportation provider based on a written contract. The provider is obligated in advance to operate public transportation services for a public transit agency or governmental unit for a specific monetary consideration, using its own employees to operate revenue vehicles. Purchased transportation (PT) does not include:
  - Franchising
  - Licensing operations
  - Management services
  - Cooperative agreements
  - Private conventional bus service

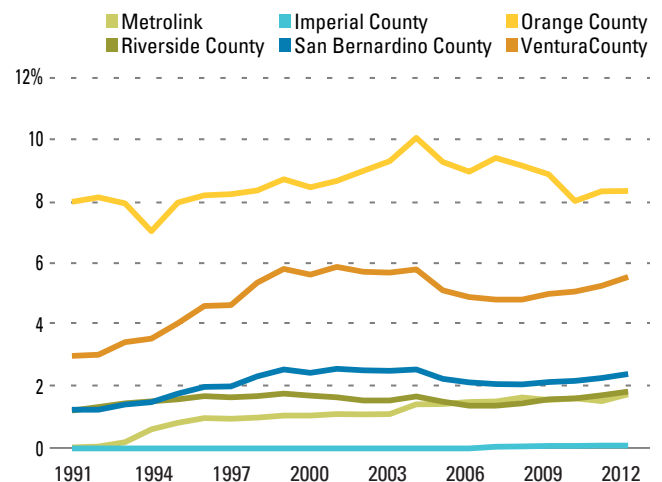
Similar to national trends, the impact of purchased transportation in the SCAG Region is felt most heavily in the demand response mode. While purchased transportation services provide 15% of fixed route bus trips, they provide 95% of demand response trips. Some large operators choose to employ purchased services on less productive routes, leading to a drastic difference (81%) in the comparative productivity, defined as passengers per service hour, of purchased and directly operated services. The much smaller difference in productivity (27%) between demand response services would indicate that the gap in fixed route productivity is not innate to the style of service provision, but is the result of policy decisions made in selecting routes for contracting.

### TRANSIT MODE SHARES

Since 1991, transit agencies in the SCAG Region have provided about 13.22 billion transit trips, almost 90% occurring on buses, 4% on heavy rail, 5% on light rail, and commuter rail and demand response each providing 1%.

**FIGURE 21 SCAG Region Transit Mode Share**

Source: NTD 2012

**FIGURE 22 Transit Mode Share All Counties but Los Angeles**

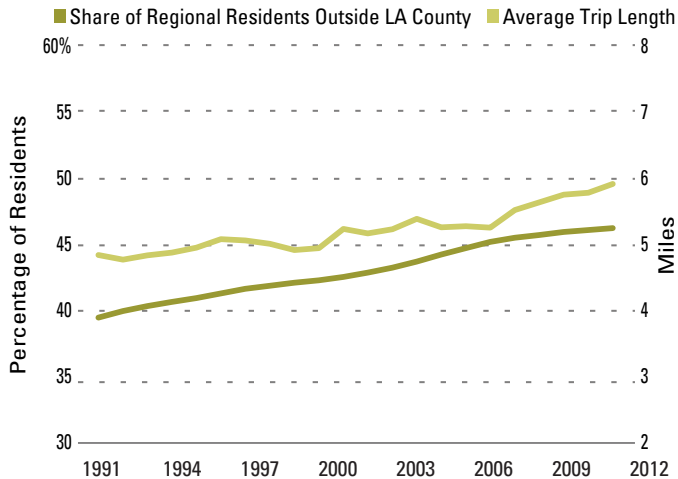
Source: NTD 2012

Between 1991 and 2011, there was a massive effort to expand the scope and nature of transit in the region. One strategy has been the proliferation of fixed guideway transit facilities. The NTD defines a fixed guideway as:

“A public transportation facility using and occupying:

- ▶ A separate right-of-way (ROW) or rail for the exclusive use of public transportation and other high occupancy vehicles (HOV), or
- ▶ A fixed catenary system useable by other forms of transportation.”

As of 1990, all regional fixed guideway transit operations consisted of express buses operating in HOV lanes. Between 1991 and 1993, the Los Angeles County Transportation Commission (LACTC), the Southern California Rapid Transit District (RTD), and Metrolink began operating light, heavy, and commuter rail service. Similarly, the passage of the Americans with Disabilities Act in 1990 mandated that accessible paratransit be provided to passengers with disabilities within

**FIGURE 23 Average Trip Length and Residential Distribution by County**

Source: California DOF 2013, NTD 2012

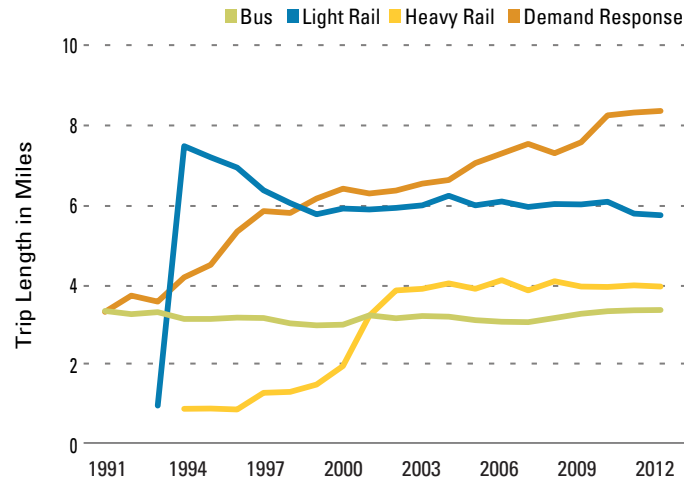
three-quarters of a mile of any fixed route bus service.

As demonstrated in Figure 21, since the opening of the Metro Blue Line in 1991, rail transit has grown from 1.3% of transit trips to approximately 10% in 2002, and to 16.1% of trips in 2012. Conversely, bus trips have declined from 98.6% of trips to 83.4% of trips. Rail transit supplies only 11.6% of all Vehicle Revenue Miles, since the per vehicle capacity of various rail modes is much higher than that of buses. However rail transit services also constitute 20.9% of all operating expenses in the SCAG Region.

### GEOGRAPHIC DISTRIBUTION OF TRANSIT TRIPS

Los Angeles County is the largest and densest county in the region, and it is no surprise that the largest percentage of transit services provided and consumed occur there. However, while Los Angeles County represents slightly more than half of the total population of the SCAG Region, it has historically represented over 80–90% of total transit ridership.

As demonstrated in Figure 22, Orange County, while

**FIGURE 24 Average Trip Length by Mode**

Source: California DOF 2013, NTD 2012

having roughly 17% of the Region's population, has seen between 8% and 12% of the total transit trip consumption since 1991. Riverside and San Bernardino Counties, despite both having grown rapidly since 1991, have differing growth patterns in terms of their overall share of regional transit consumption. While San Bernardino County has grown from 1% to nearly 3%, Riverside County has hovered steadily at roughly 1%. Ventura and Imperial Counties represent fairly small portions of the region's overall transit trips. Los Angeles County is not depicted below in order to maintain the scale of the chart.

### Increasing Average Trip Length

Figure 23 details the impact of changes in residential patterns by county on average trip length. As the share of regional residents living in a County other than Los Angeles County has grown from 39.9% to 45.8%, the average length of a transit trip has grown by 15%.

Figure 24 demonstrates the modal breakdown of this growth in average trip length. Newer modes, including

### DEMAND RESPONSE TRIPS LENGTHS INCREASE



Since **1991** demand response trip lengths have seen a radical growth of **232%** from just over four miles a trip to nearly **9.5 miles a trip**.

commuter rail and light rail, are being used to serve much longer trips, and increasing demand response trip lengths reflect new residential distribution patterns. Commuter rail trips have retained an average of nearly 35 miles a trip and range of standard deviation of 2.4 (roughly 7% of the mean value). Bus trips have also maintained a mean trip length of four miles, with a standard deviation of 0.12.

Changes in average rail trip length relate most closely to system expansions by Metro. As new rail corridors enter service, they serve travel markets of varying lengths. The average trip length of light rail transit started at 8.7 miles when the Metro Blue entered service in the early 1990s, serving a relatively longer distance market. The subsequent opening of the Metro Green Line, Metro Gold Line and Metro Gold Line Eastside Extension led to an eventual 21% decline in average trip lengths, as those corridors served shorter distance trips.

In contrast, the heavy rail mode shows great growth after the opening of the Metro Red Line Extensions to Hollywood and North Hollywood 1999 and 2000. These extensions doubled and then tripled the extent of the regional heavy rail system, from 10 directional route miles, to 20, and then to 32.

In contrast, demand response trips have seen a radical growth of 232%, from just over four miles a trip to nearly 9.5 miles a trip. This is the largest average trip length growth of any transit mode, and partially explains the rapid growth of the demand response mode in terms of service hours.

### Service Provision and Consumption by Urbanized Area

Within the US Census defined urbanized areas of the SCAG Region, there is a similar pattern in the provision and consumption of transit service. These areas exclude rural areas, where relatively small proportions of the region's transit service is provided or consumed. As demonstrated in Table 8 the vast bulk of transit service, trips, passenger miles, and operating expenses occur in the Los Angeles-Long Beach-Anaheim UZA. This UZA, containing central Los Angeles County, Northern Orange County, and small portions of Riverside and San Bernardino Counties represents the vast bulk of the population of the SCAG Region, with over 12 million residents.

Given its massive size, it's no surprise that the Los Angeles-Long Beach-Anaheim UZA makes up the largest portion of service provided, service consumed, and costs. However, the UZA represents approximately 89% of all operating costs, while supplying 87% of the service hours and carrying 94% of all trips. While each individual unit of service might be more expensive to provide within the UZA, it can be concluded that this service is more productive on the whole.

### REGIONAL PERFORMANCE SUMMARY

The long term ridership trend in the region is some growth. As noted previously, since 1992, the average per capita trips has risen from 38 to 39, with a high of

**TABLE 8 Share of Service Provision and Consumption by Urbanized Area**

	Vehicle Revenue Miles	Vehicle Revenue Hours	Unlinked Passenger Trips	Operating Expenses
<b>Camarillo, CA</b>	0.07%	0.08%	0.01%	0.04%
<b>El Centro-Calexico, CA</b>	0.34%	0.23%	0.09%	0.18%
<b>Indio-Cathedral City, CA</b>	1.14%	1.23%	0.64%	0.89%
<b>Lancaster-Palmdale, CA</b>	1.03%	0.91%	0.44%	0.82%
<b>Los Angeles-Long Beach- Anaheim, CA</b>	85.86%	86.34%	93.75%	90.61%
<b>Oxnard, CA</b>	1.39%	1.41%	0.64%	0.86%
<b>Riverside-San Bernardino, CA</b>	7.61%	7.49%	3.54%	4.95%
<b>Santa Clarita, CA</b>	1.19%	1.05%	0.51%	0.86%
<b>Simi Valley, CA</b>	0.20%	0.22%	0.06%	0.20%
<b>Thousand Oaks, CA</b>	0.31%	0.30%	0.05%	0.17%
<b>Victorville-Hesperia, CA</b>	0.86%	0.74%	0.26%	0.42%
<b>Yuma AZ-CA</b>	0.20%	.13%	.03%	.13%

Source: NTD 2012

43 in 2007. At the same time, productivity has fallen, with passengers per hour down about 24% since 1992.

Costs are rising as distribution of residents spreads and the average length of transit trips grows. As can be seen in Figure 24, the average cost of a passenger trip has grown by 47%, while the average cost per passenger mile has grown only by 15%. This confirms that longer, costlier-to-supply trips are growing as a proportion of all transit travel.

The region's operating costs per revenue hour have fluctuated significantly over the past 20 years but

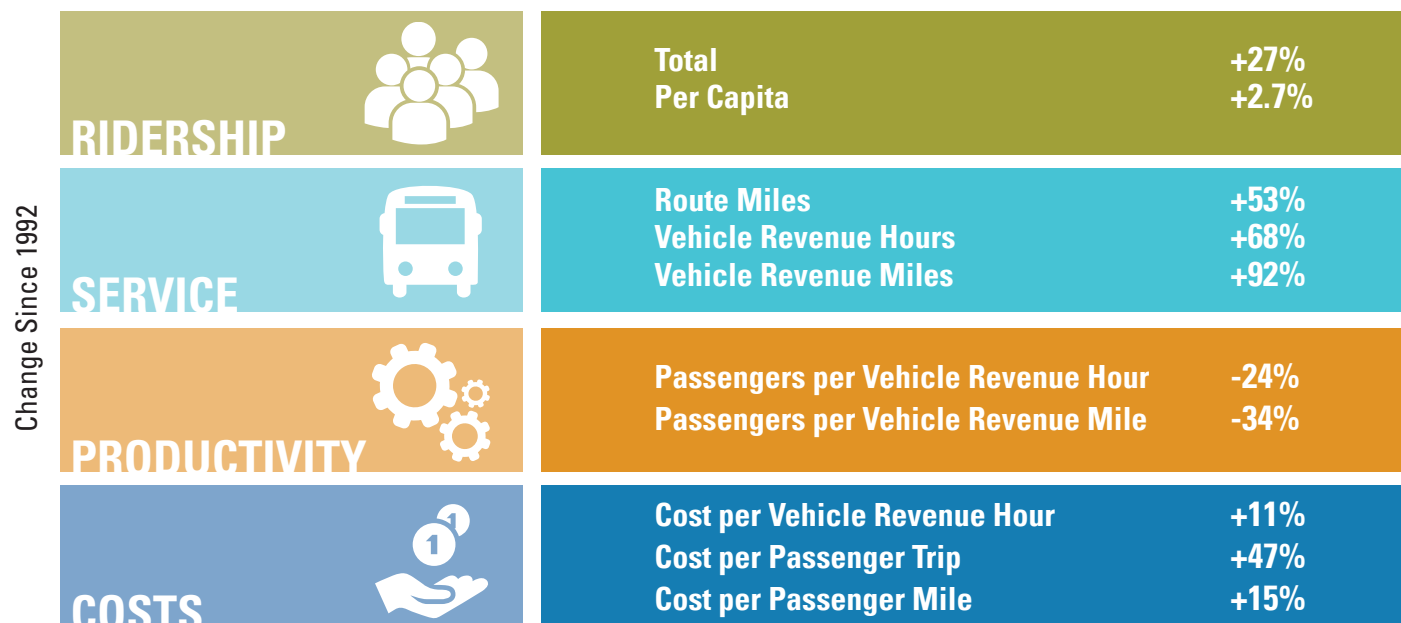
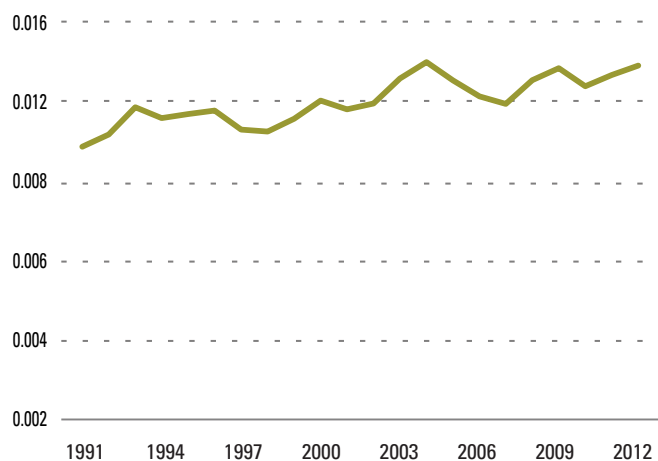
have been steadily increasing over the last decade, while farebox recovery has remained fairly steady.

### THE ROLE OF BUSES IN THE REGION'S TRANSIT SYSTEM

Buses provided **75%** of all service and carried **83.4%** of trips in FY2011-12. While those shares are declining, they are doing so slowly. It's the overwhelming majority of all transit-based mobility in the region.





**FIGURE 25 Twenty Year Transit Trends, 1992-2012****FIGURE 26 Demand Response Trips per Fixed Route Trip**

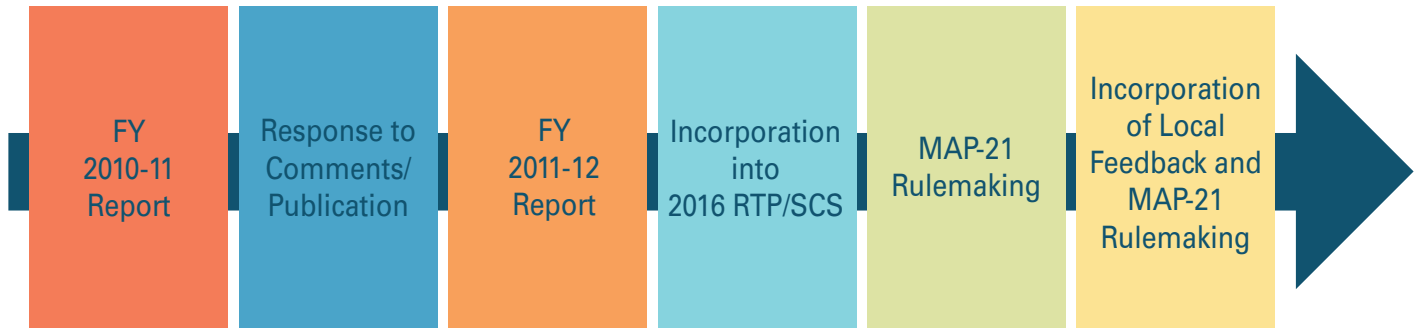
Source: NTD 2012

Costs per passenger mile were very fairly volatile in the 1990s, but have been surprisingly steady since 2001, given the rising importance of rail transit in the

region. Passengers per hour are decreasing, while the cost per passenger trip is increasing commensurately. Average vehicle age is increasing again after a rapid decrease in the early 2000s, while increasing vehicle speeds may reflect the increasing role of rail transit and exurban fixed route bus service.

The measures selected for the operator profiles in the next section were identified in Table 4. Figures 28-35 display the aggregate regional performance for these measures, across all modes.

The declines in productivity evident in Figures 29 and 33 are most likely a product of the increase in service hours over the last 20 years. As service has increased, it is no longer being used as intensely as it was in the early 1990s. Of course, there are valid policy reasons to seek to lower passengers per hour or mile. For instance, an agency could seek to extend service further into the evening, seeking to provide later return

**FIGURE 27 Creating a performance baseline for the 2016 RTP/SCS**

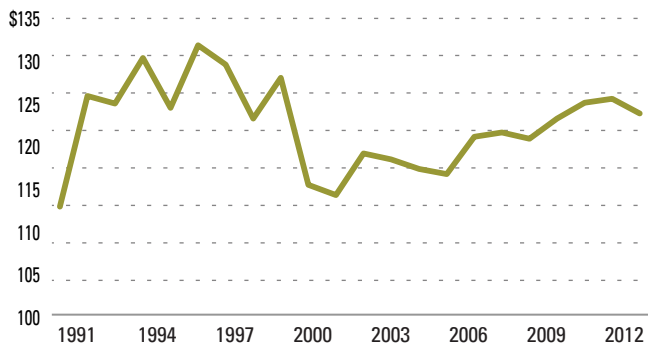
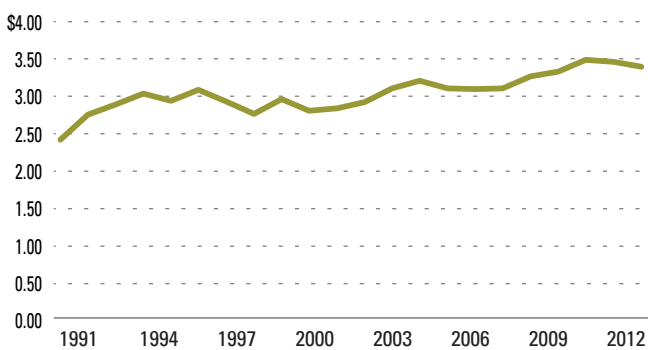
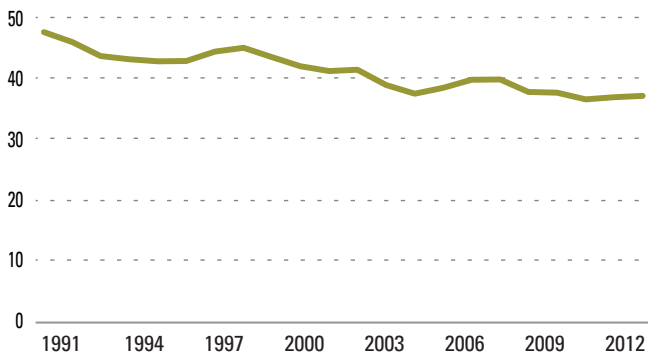
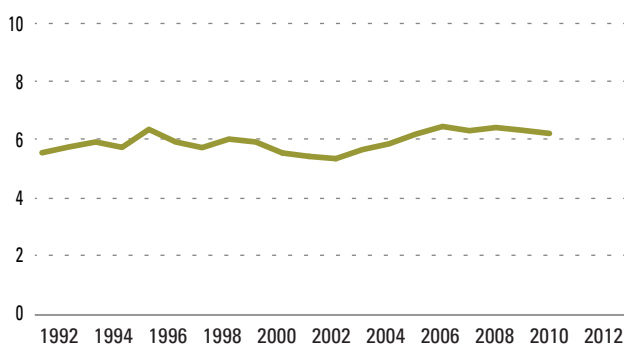
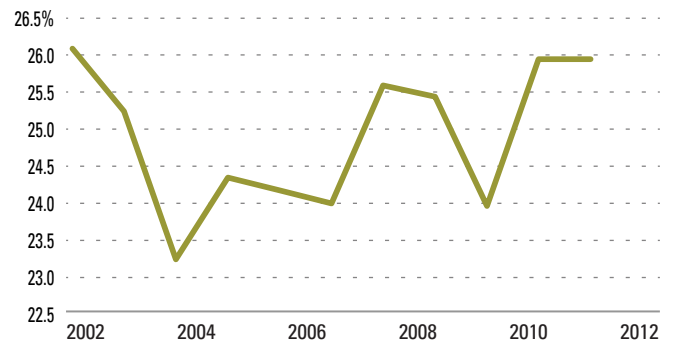
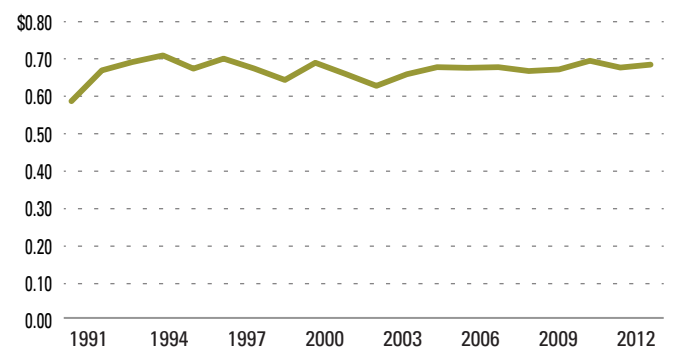
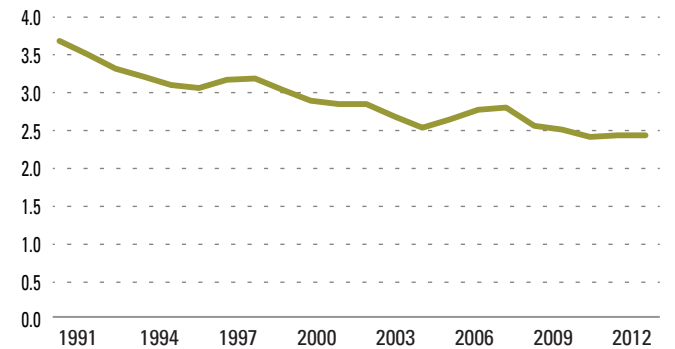
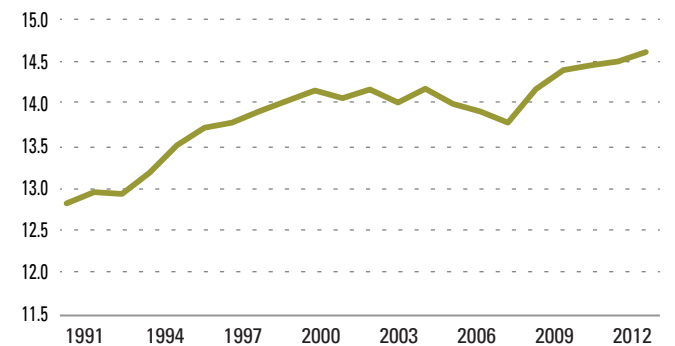
trip options for travelers or to provide mobility for service sector workers who often work well into the evening. Similarly, an agency might determine that the load factors on its runs are too high, and seek to provide extra service so that travelers would have more comfortable rides.

Similarly, as discussed on page 13, the region's demand for paratransit services has grown significantly. Transit agency stakeholders commented during the draft process that a good way of understanding those changes to demand is the measure of Demand Response trips per fixed route bus trip. Figure 26 captures that measure, and also displays the rate of demand response trips to all fixed route trips. The average number of demand response trips per fixed route bus trips has grown by 47% in the past 21 years, and by 2012, the region was providing 0.014 demand response trips for every fixed route bus trip.

### NEXT STEPS FOR THE FY2011-12 TRANSIT SYSTEM PERFORMANCE REPORT

The 2011-12 Transit System Performance serves as an important component in the production of the transit element of the 2016 RTP/SCS. Fiscal Year 2011-12 will serve as the planning base year for the document, so the data contained in this report will provide the initial baseline of transit system performance for the 2016 RTP/SCS, and will provide the transit portion of the MAP-21 mandated system performance report in that plan. While the forthcoming rulemaking may affect the data and measures that will be incorporated into future plans, this effort will provide a baseline, validated by stakeholder and operating agency approval, of base year system performance.

## AGGREGATE REGIONAL PERFORMANCE FOR OPERATOR PROFILES\*

**FIGURE 28 Operating Cost per Revenue Hour****FIGURE 29 Operating Cost per Passenger Trip****FIGURE 30 Passengers per Vehicle Revenue Hour****FIGURE 31 Fleet Average Vehicle Age****FIGURE 32 Farebox Recovery****FIGURE 33 Operating Cost per Passenger Mile****FIGURE 34 Passengers per Vehicle Revenue Mile****FIGURE 35 Average Vehicle Speed, in Miles per Hour**

\*Source: NTD 2012

<sup>i</sup> National Transit Database, Glossary, downloaded from <http://www.ntdprogram.gov/ntdprogram/Glossary.htm#F> on 4/4/2013

<sup>ii</sup> Metro.net, <http://isotp.metro.net/>

<sup>iii</sup> U.S. Department of Transportation, Federal Highway Administration, 2009 National Household Travel Survey

<sup>iv</sup> US Census, 2009-2011 American Community Survey 3-Year Estimates "Selected Economic Characteristics," downloaded from [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_11\\_3YR\\_DP03&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_DP03&prodType=table) on 4/4/13

<sup>v</sup> US Census, 2009-2011 American Community Survey 5-Year Estimates "Selected Economic Characteristics"

<sup>vi</sup> Adie Tomer, "Transit Access and Zero Vehicle Households" Brookings Institution 2011

<sup>vii</sup> American Public Transportation Association, 2009, "Job Impacts of Spending on Public Transportation: An Update." White Paper

<sup>viii</sup> American Public Transportation Association in partnership with Victoria Transport Policy Institute 2010, Evaluating Public Transportation Health Benefits

<sup>ix</sup> Texas Transportation Institute, 2012 Annual Urban Mobility Report

<sup>x</sup> APTA, 2014 , *2013 Public Transportation Fact Book*, page 26

<sup>xi</sup> APTA 2014, *2013 Public Transportation Fact Book*, page 34. This total does not include vanpools or publicos



## SECTION 03

### Operator Profiles



Metro



Omnitrans

## INTRODUCTION

*Section 03: Operator Profiles depicts the individual performance of each of the transit properties in the SCAG Region that report performance data within the National Transit Database's urban operator format. The key objective of the Operator profiles is to provide a benchmarking resource which providers of public transportation can use to compare their system's performance to that of comparable agencies. The measures selected for analysis were agreed upon by the members of the Regional Transit Technical Advisory Committee (RTTAC), SCAG's key venue for outreach and collaboration with the various transit properties in the region. Subsequently, in the autumn of 2012, the measures were also reviewed by the High Speed Rail and Transit subcommittee of SCAG's Transportation Committee.*

*The selected measures are detailed in Table 4, on page 10. They focus on cost efficiency, cost effectiveness, productivity, maintenance, and mobility. Further details about the process by which they were selected can be found in Appendix B.*

*Where possible, the data presented include an analysis of performance trends from FY1990-91 to FY2011-12.*



## IMPERIAL VALLEY TRANSIT



1405 North Imperial Avenue, Suite 1  
 El Centro, CA 92343  
<http://www.ivtransit.com>

<b>Governance Structure</b>	County Transportation Commission
<b>Base Fare</b>	\$75
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	N/A
<b>Total Operating Budget</b>	\$4,524,132
<b>Capital Expenditures</b>	N/A
<b>Annual Service Provided</b>	47,000 Hours
<b>Service Area</b>	4,598 Square Miles
<b>Fleet Size</b>	27 Vehicles
<b>Extent of System</b>	623 Directional Route Miles
<b>Span of Service</b>	17 hours

Please see reporting exceptions list in Appendix C

## YUMA COUNTY AREA TRANSIT



<b>500 South Orange Avenue Yuma, AZ 85364 ycat.org</b>	
<b>Governance Structure</b>	Intergovernmental Public Transportation Authority
<b>Base Fare</b>	\$2.00
<b>Day Pass</b>	\$5.00
<b>Monthly Pass</b>	\$60.00
<b>Total Operating Budget</b>	\$2,666,274
<b>Capital Expenditures</b>	\$15,197
<b>Annual Service Provided</b>	31,486 Hours
<b>Service Area</b>	78 Square Miles
<b>Fleet Size</b>	30 Vehicles
<b>Extent of System</b>	340 Directional Route Miles
<b>Span of Service</b>	16 hours
<b>The Majority of YCAT Service occurs in Arizona and is not reported here</b>	

ACCESS SERVICES INCORPORATED  
OF LOS ANGELES (ASI)

**access**

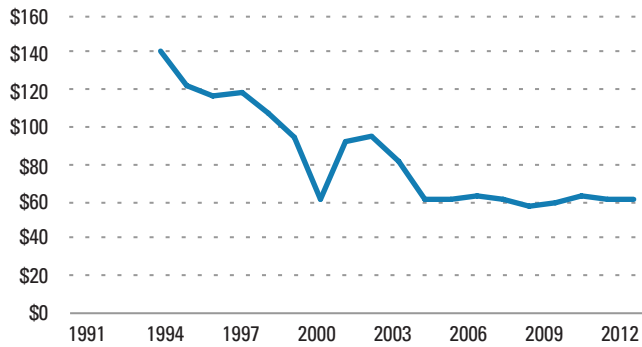
3449 Santa Anita Avenue, P.O. Box 5728  
El Monte, CA 91734-1728  
<http://www.asila.org>

<b>Governance Structure</b>	Incorporated Membership Organization
<b>Base Fare</b>	\$ 2.50
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	N/A
<b>Total Operating Budget</b>	\$ 111, 337,095
<b>Capital Expenditures</b>	\$8,263,034
<b>Annual Service Provided</b>	1,621,630 Hours
<b>Service Area</b>	1621 Square Miles
<b>Fleet Size</b>	745 Vehicles
<b>Extent of System</b>	N/A
<b>Span of Service</b>	24 hours

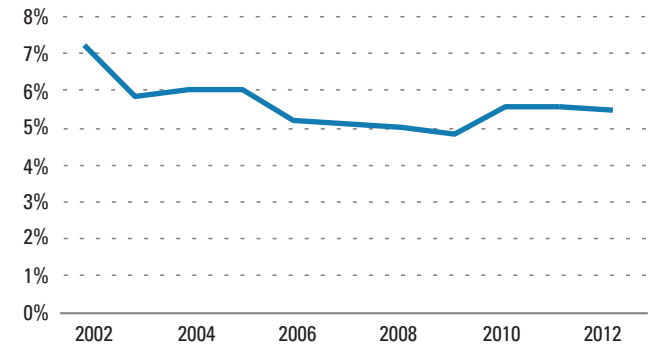
## ASI DEMAND RESPONSE

## LOS ANGELES COUNTY

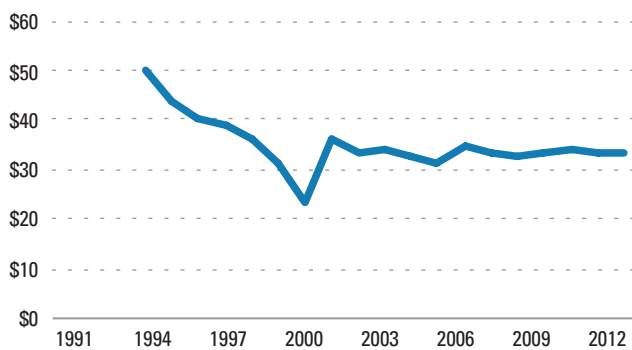
### Cost per Service Hour



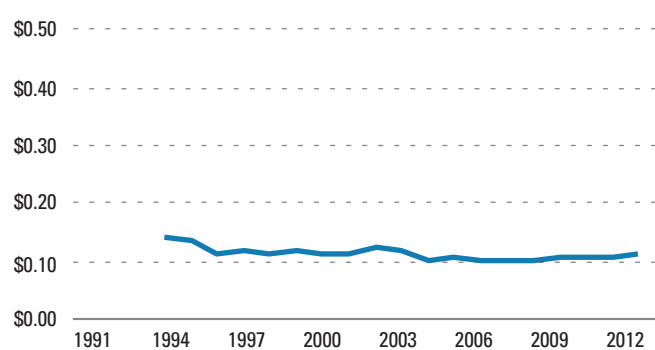
### Farebox Recovery



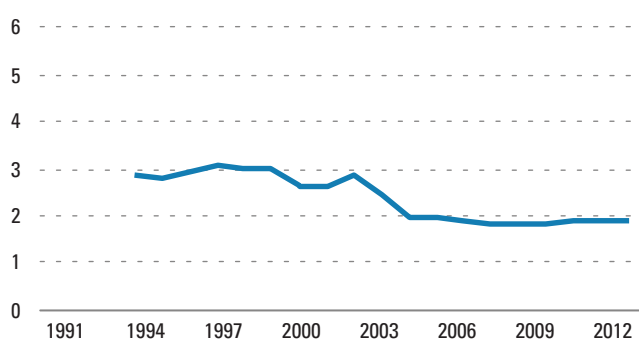
### Cost per Passenger Trip



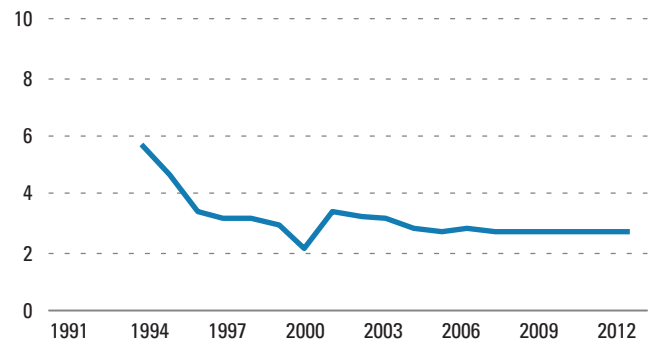
### Cost per Passenger Mile



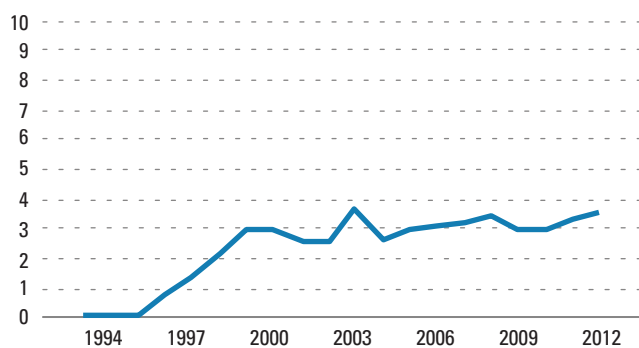
### Passengers per Service Hour



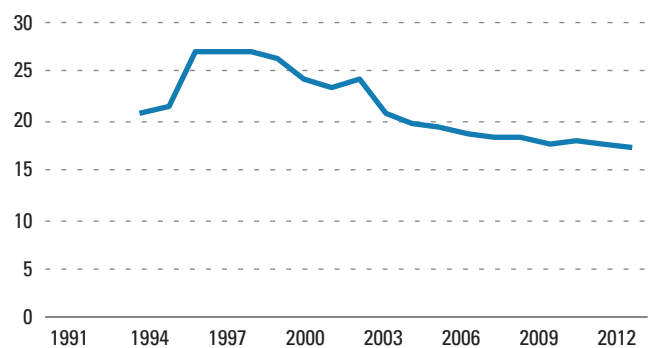
### Passengers per Service Mile



### Fleet Average Vehicle Age



### Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

ANTELOPE VALLEY TRANSIT  
AUTHORITY (AVTA)



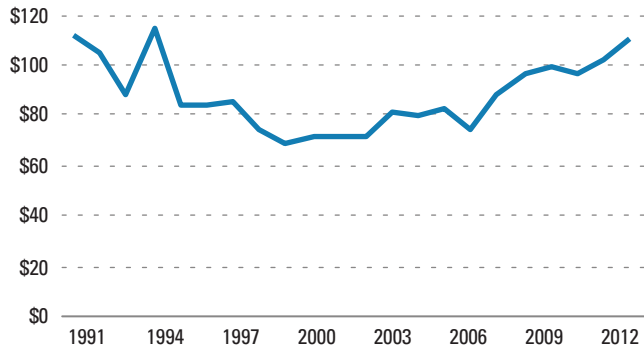
42210 6th Street West  
Lancaster, CA 93534-7124  
<http://www.avta.com>

<b>Governance Structure</b>	Joint Powers Authority
<b>Base Fare</b>	\$1.50
<b>Day Pass</b>	\$3.75
<b>Monthly Pass</b>	\$50
<b>Total Operating Budget</b>	\$20,117,490
<b>Capital Expenditures</b>	\$419,814
<b>Annual Service Provided</b>	181,531 Hours
<b>Service Area</b>	1,200 Square Miles
<b>Fleet Size</b>	102 Vehicles
<b>Extent of System</b>	526 Directional Route Miles
<b>Span of Service</b>	15 Hours

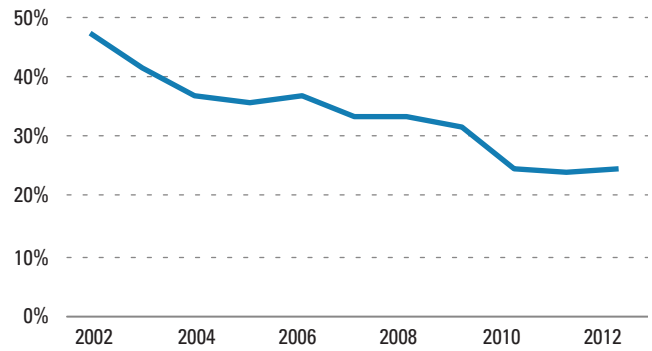
AVTA FIXED ROUTE

LOS ANGELES COUNTY

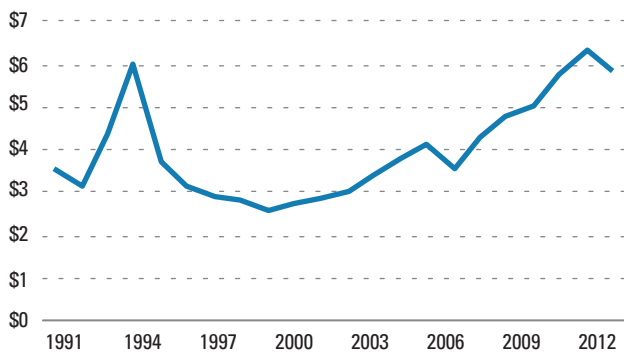
Cost per Service Hour



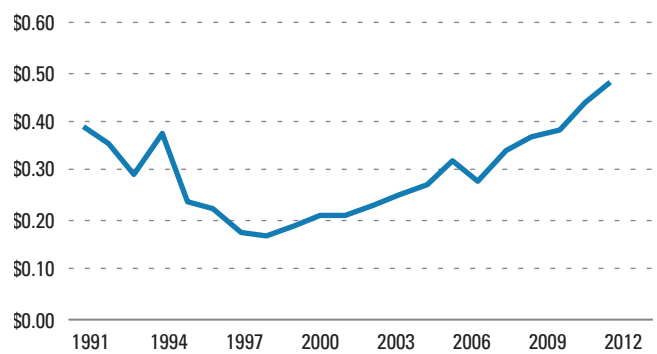
Farebox Recovery



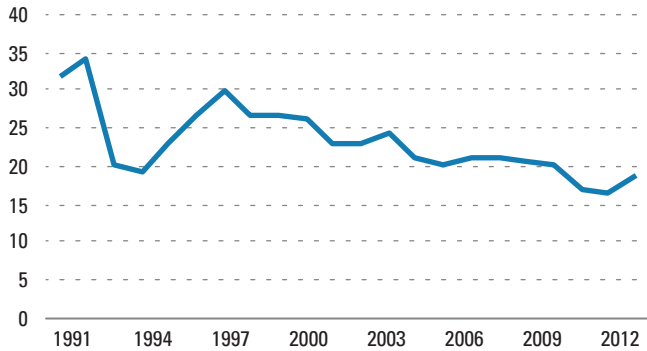
Cost per Passenger Trip



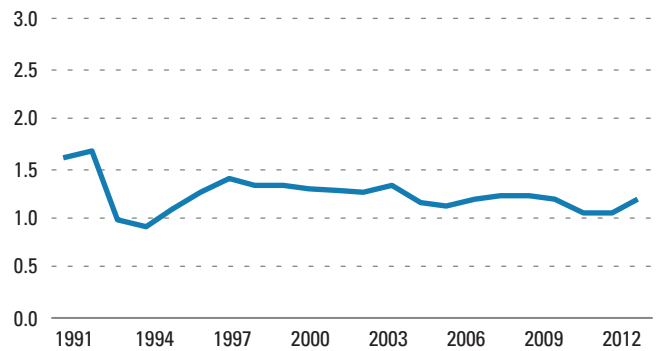
Cost per Passenger Mile



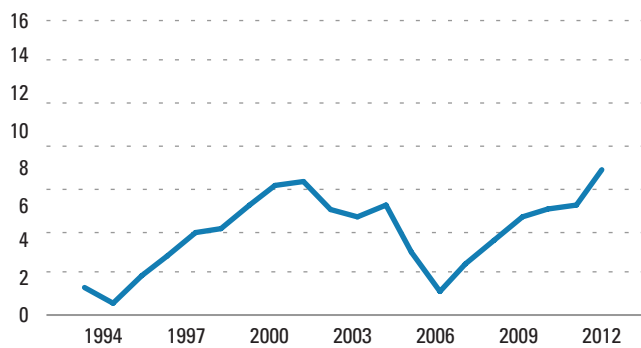
Passengers per Service Hour



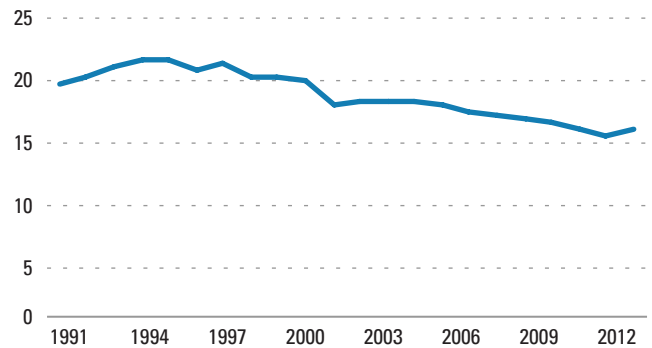
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour

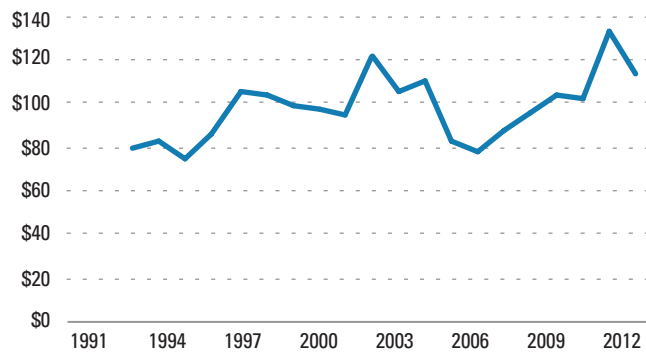


\*Source: NTD 2012

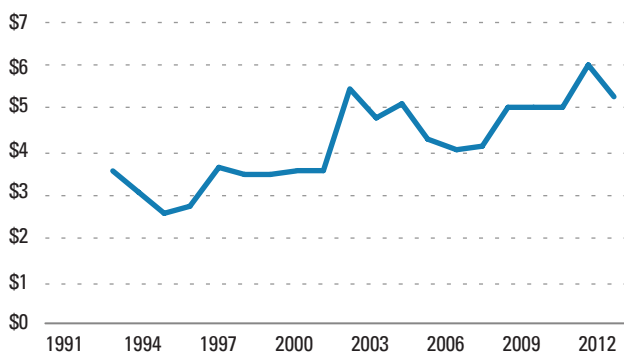


## AVTA DEMAND RESPONSE

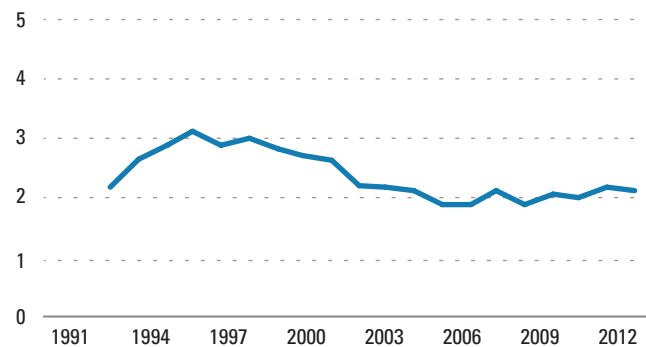
## Cost per Service Hour



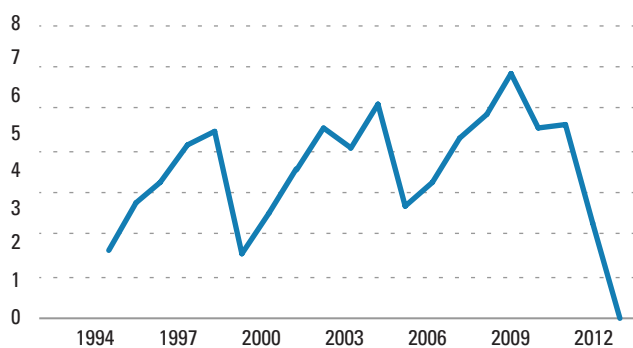
## Cost per Passenger Trip



## Passengers per Service Hour

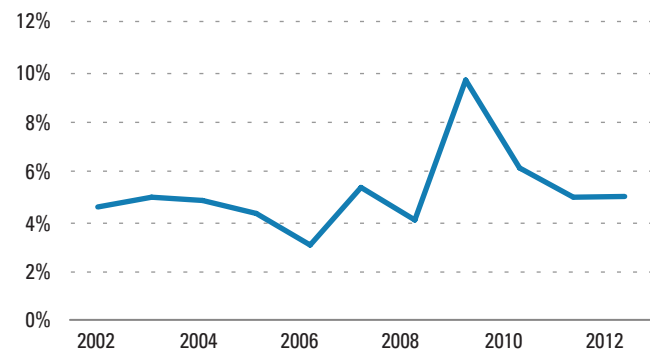


## Fleet Average Vehicle Age

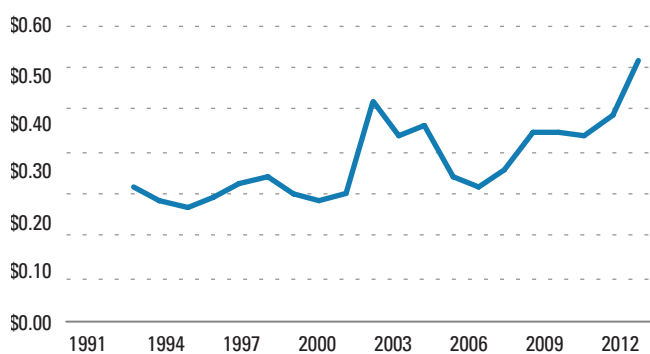


## LOS ANGELES COUNTY

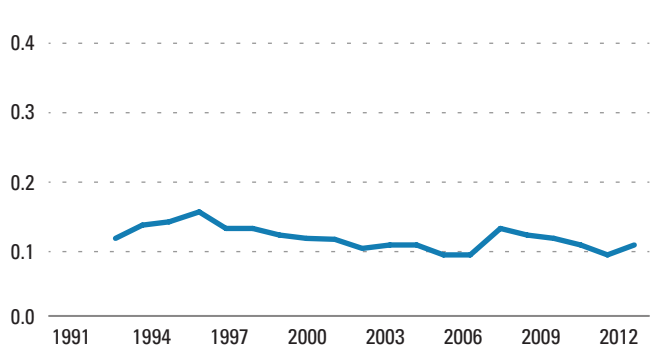
## Farebox Recovery



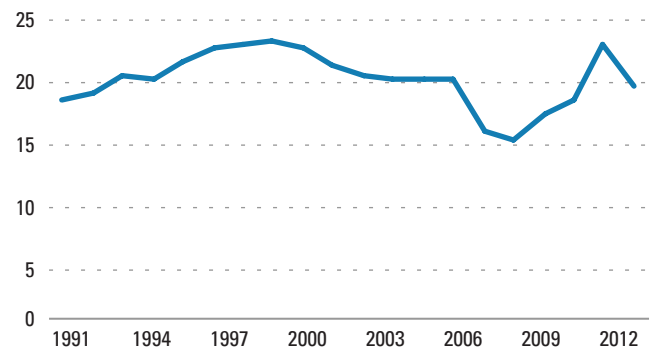
## Cost per Passenger Mile



## Passengers per Service Mile



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

CITY OF ARCADIA TRANSIT  
(ARCADIA TRANSIT)



**Arcadia Transit**

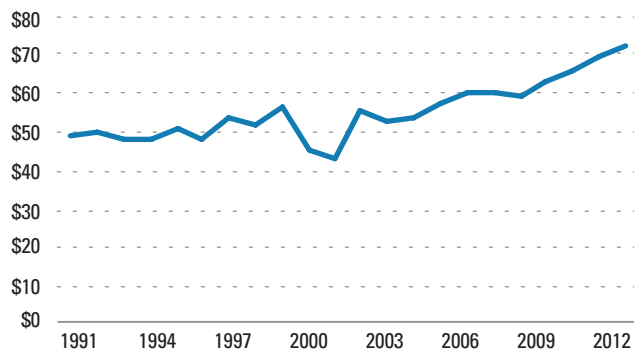
240 West Huntington Drive, P.O. Box 60021  
Arcadia, CA 91066-6021  
<http://www.ci.arcadia.ca.us>

<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	N/A
<b>Total Operating Budget</b>	\$1,657,558
<b>Capital Expenditures</b>	\$0
<b>Annual Service Provided</b>	22,926 Hours
<b>Service Area</b>	11 Square Miles
<b>Fleet Size</b>	18 Vehicles
<b>Extent of System</b>	N/A
<b>Span of Service</b>	15 Hours

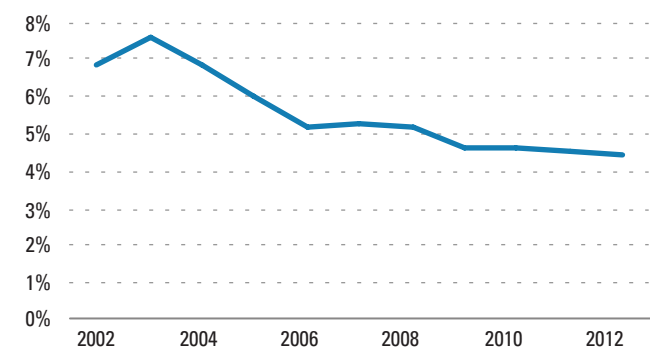
## ARCADIA TRANSIT DEMAND RESPONSE

## LOS ANGELES COUNTY

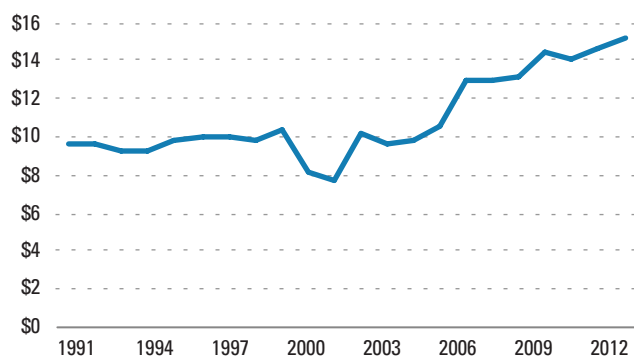
## Cost per Service Hour



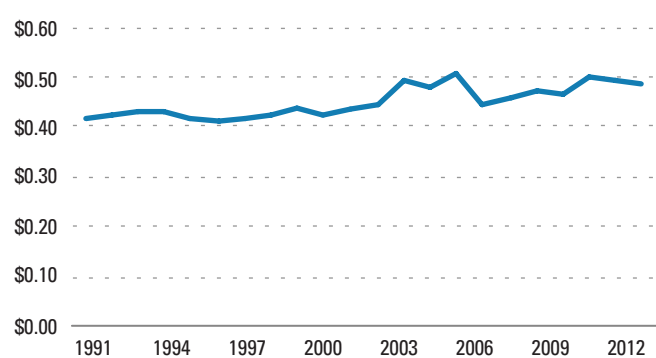
## Farebox Recovery



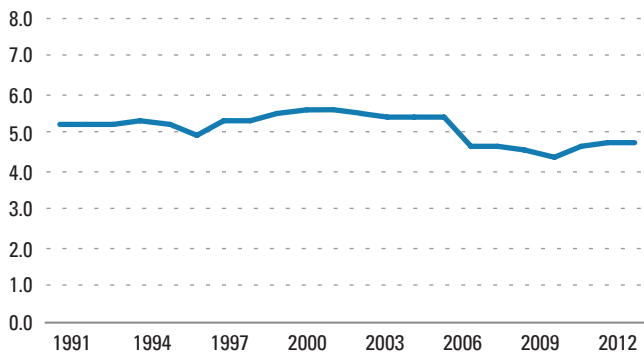
## Cost per Passenger Trip



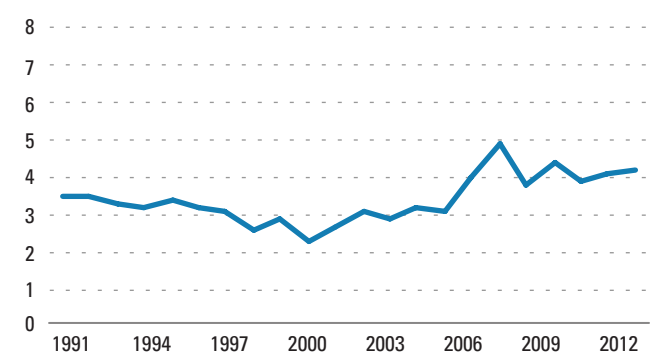
## Cost per Passenger Mile



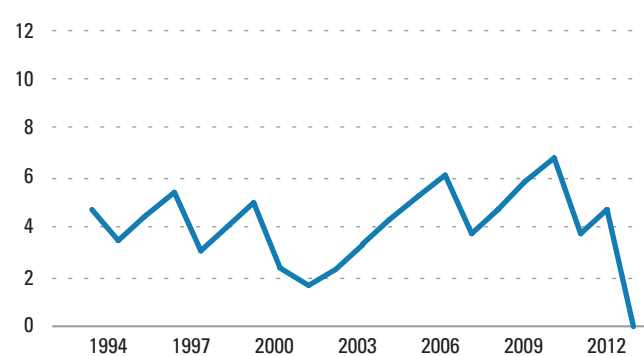
## Passengers per Service Hour



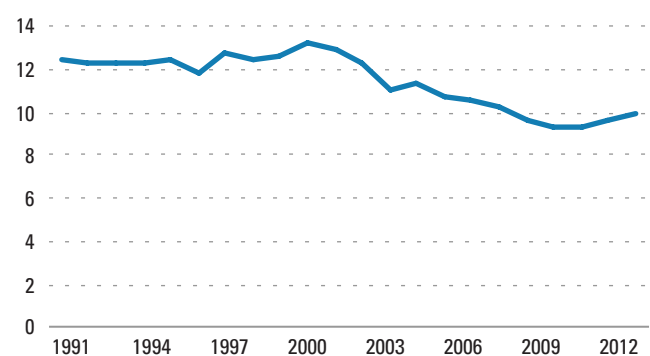
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## BEACH CITIES TRANSIT



415 Diamond Street  
Redondo Beach, CA 90277  
<http://redondo.org/>

<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	\$40
<b>Total Operating Budget</b>	\$ 2,565,725
<b>Capital Expenditures</b>	\$ 1,887,278
<b>Annual Service Provided</b>	39,633 Hours
<b>Service Area</b>	13 Square Miles
<b>Fleet Size</b>	20 Vehicles
<b>Extent of System</b>	63 Directional Route Miles
<b>Span of Service</b>	15 Hours

Please see reporting exceptions list in Appendix C



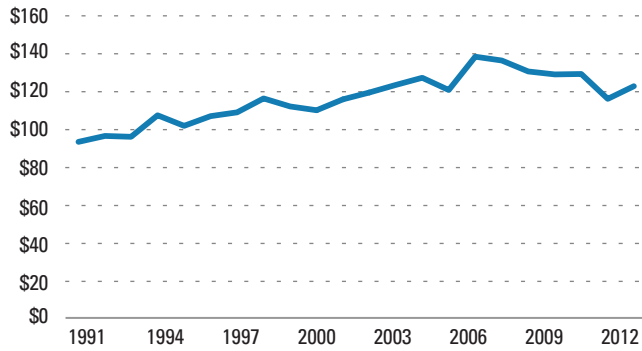
## CITY OF COMMERCE MUNICIPAL BUS LINES (CBL)

2535 Commerce Way Commerce, CA 90040 <a href="http://ci.commerce.ca.us">ci.commerce.ca.us</a>	
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$0.00
<b>Day Pass</b>	\$0.00
<b>Monthly Pass</b>	\$0.00
<b>Total Operating Budget</b>	\$ 2,867,458
<b>Capital Expenditures</b>	\$ 102,275
<b>Annual Service Provided</b>	23,598 Hours
<b>Service Area</b>	10 Square Miles
<b>Fleet Size</b>	14 Vehicles
<b>Extent of System</b>	135 Directional Route Miles
<b>Span of Service</b>	12 hours

COMMERCE MUNICIPAL BUS LINES FIXED ROUTE

LOS ANGELES COUNTY

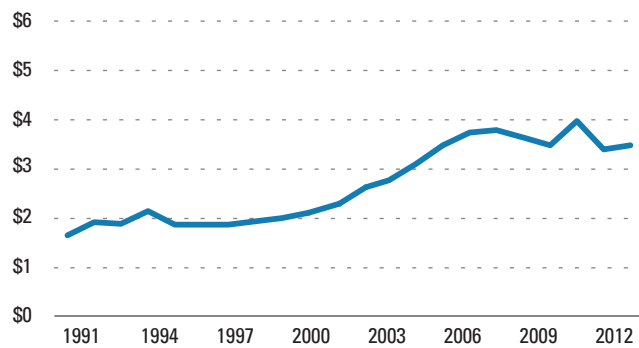
Cost per Service Hour



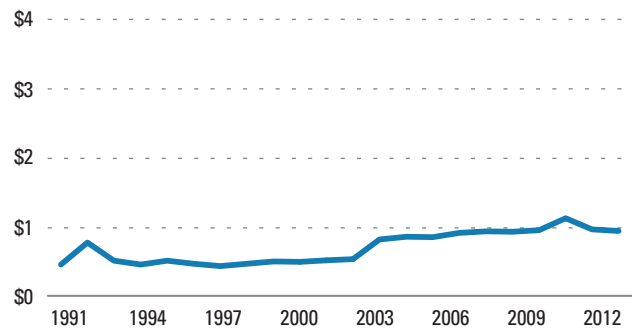
Farebox Recovery

The City of Commerce Municipal Bus Lines does not charge a fare

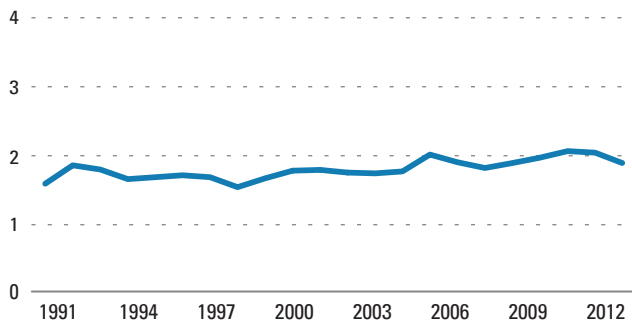
Cost per Passenger Trip



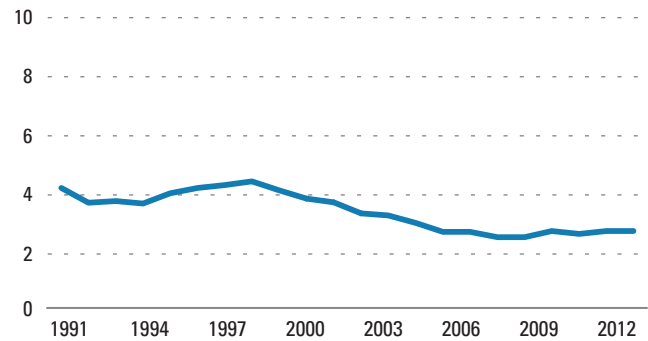
Cost per Passenger Mile



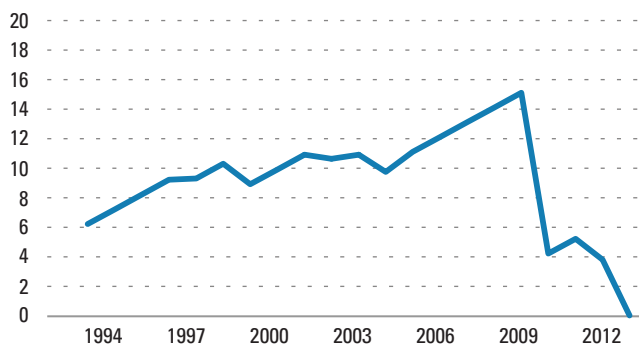
Passengers per Service Hour



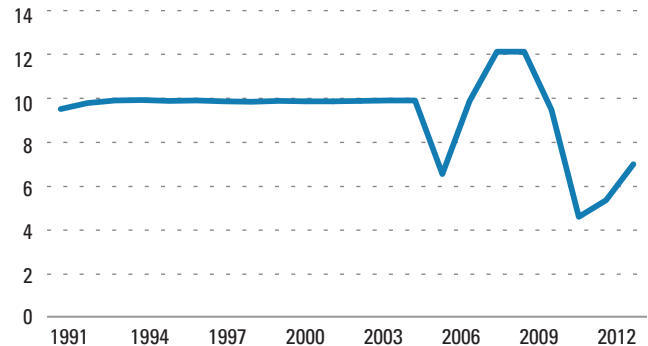
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012



CULVER CITY MUNICIPAL BUS LINES  
(CULVER CITY BUS)

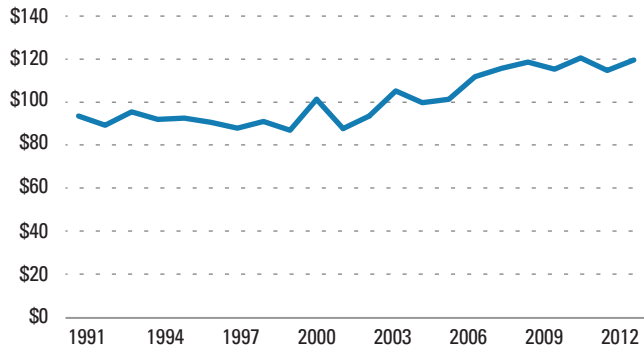


<b>4343 Duquesne Avenue Culver City, CA 90232-2941 <a href="http://www.culvercity.org">http://www.culvercity.org</a></b>	
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	\$84
<b>Total Operating Budget</b>	\$18,216,327
<b>Capital Expenditures</b>	\$11,107,337
<b>Annual Service Provided</b>	145,727 Hours
<b>Service Area</b>	33 Square Miles
<b>Fleet Size</b>	52 Vehicles
<b>Extent of System</b>	107 Directional Route Miles
<b>Span of Service</b>	20 Hours

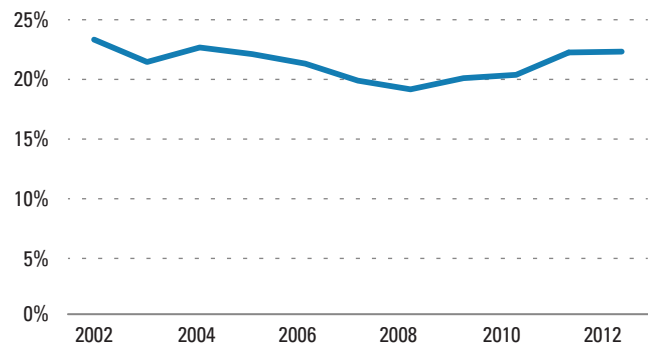
CULVER CITY MUNICIPAL BUS LINES FIXED ROUTE

LOS ANGELES COUNTY

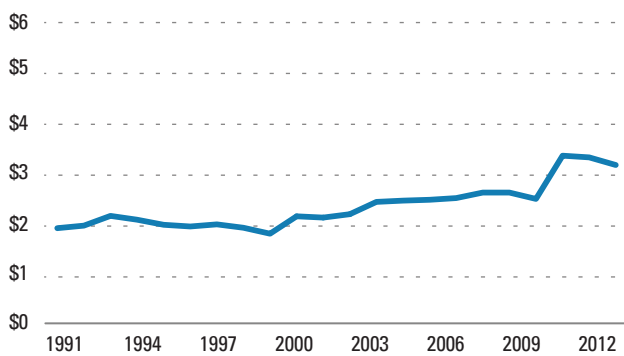
Cost per Service Hour



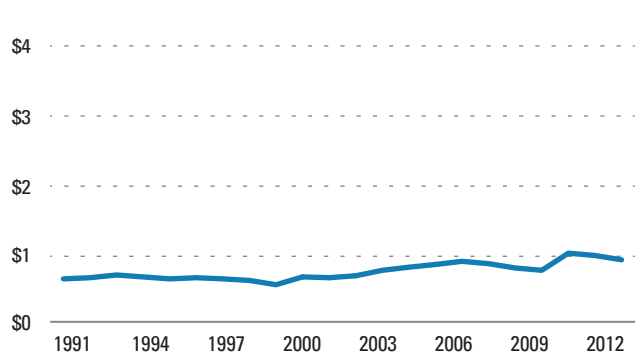
Farebox Recovery



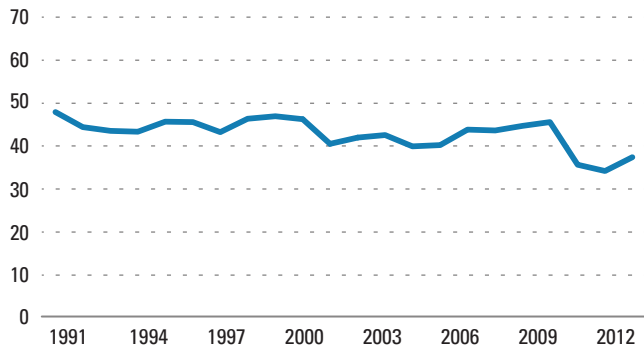
Cost per Passenger Trip



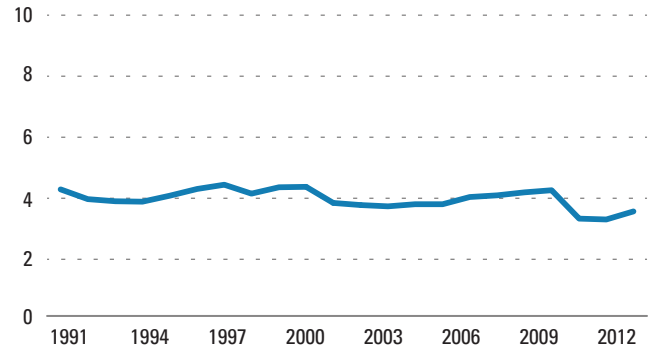
Cost per Passenger Mile



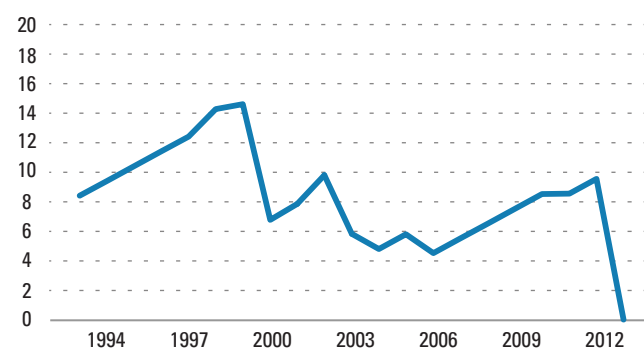
Passengers per Service Hour



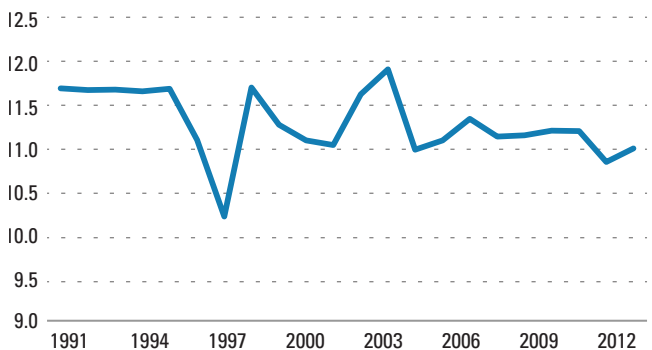
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## FOOTHILL TRANSIT



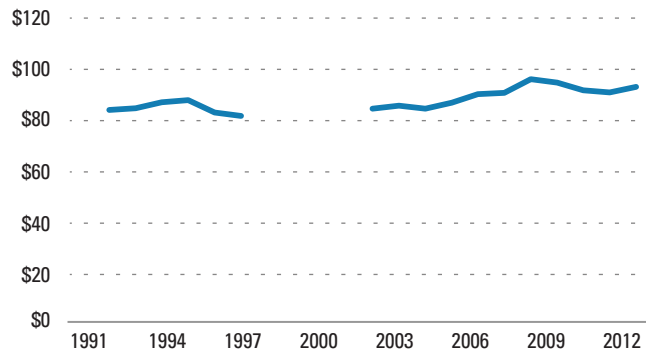
100 South Vincent Avenue, Suite 200  
West Covina, CA 91790-2902  
<http://www.foothilltransit.org>

<b>Governance Structure</b>	Joint Powers Authority
<b>Base Fare</b>	\$1.25
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	\$70
<b>Total Operating Budget</b>	\$ 62,614,618
<b>Capital Expenditures</b>	\$ 17,269,306
<b>Annual Service Provided</b>	671,603 Hours
<b>Service Area</b>	327 Square Miles
<b>Fleet Size</b>	300 Vehicles
<b>Extent of System</b>	836 Directional Route Miles
<b>Span of Service</b>	24 Hours

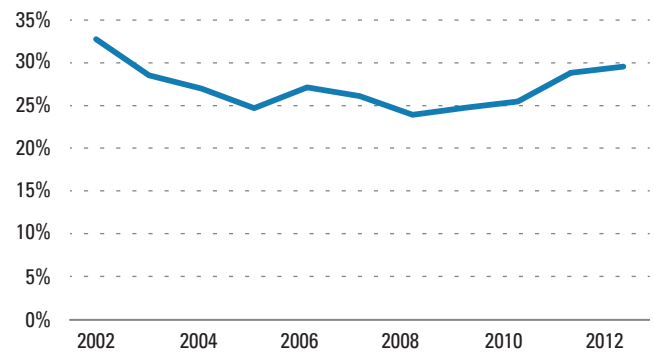
## FOOTHILL TRANSIT FIXED ROUTE

## LOS ANGELES COUNTY

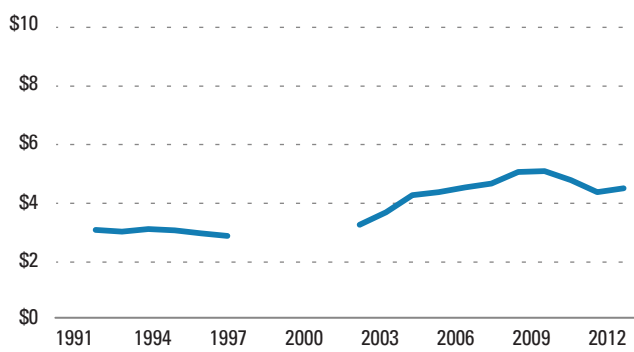
## Cost per Service Hour



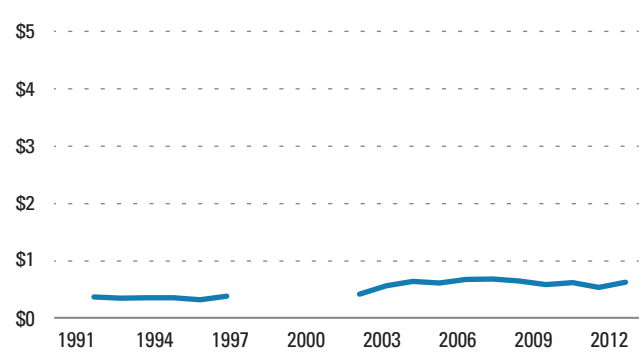
## Farebox Recovery



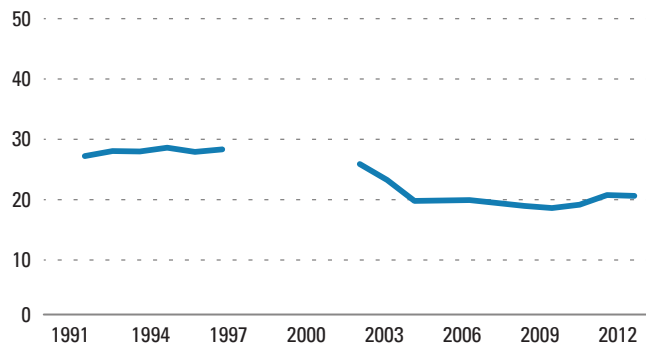
## Cost per Passenger Trip



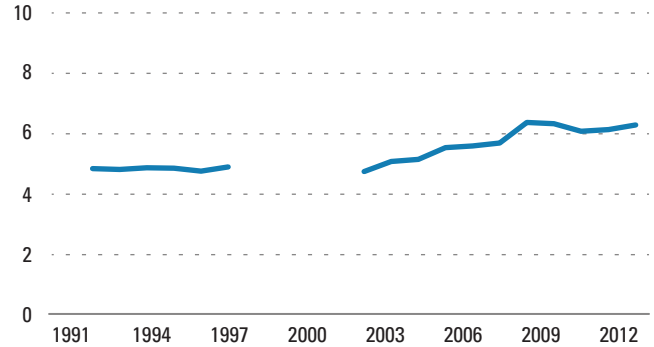
## Cost per Passenger Mile



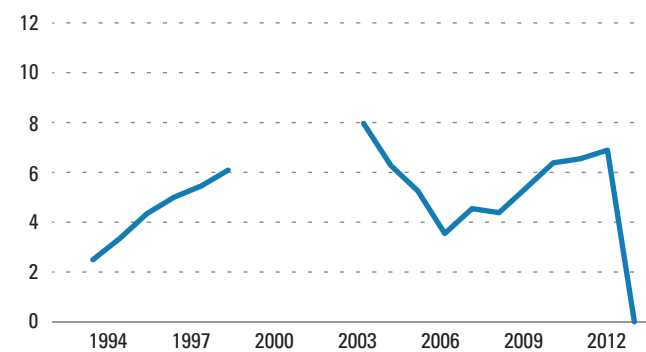
## Passengers per Service Hour



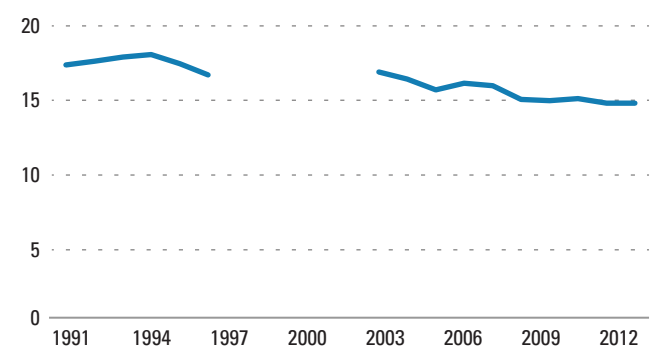
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

GARDENA MUNICIPAL BUS LINES  
(GMBL)

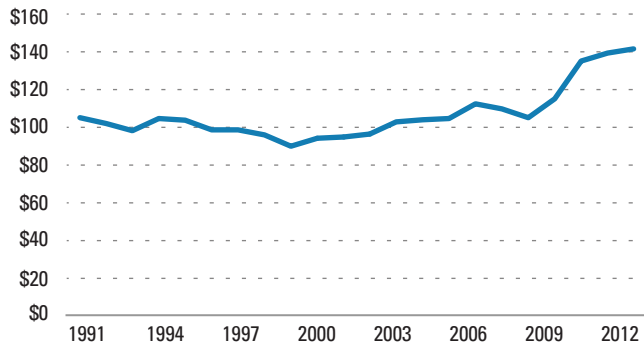


13999 S. Western Ave. Gardena, CA 90249-3005 <a href="http://www.ci.gardena.ca.us">http://www.ci.gardena.ca.us</a>	
Governance Structure	Municipally Owned Transit Property
Base Fare	\$1
Day Pass	N/A
Monthly Pass	N/A
Total Operating Budget	\$ 17,311,038
Capital Expenditures	\$ 841,897
Annual Service Provided	125,967 Hours
Service Area	40 Square Miles
Fleet Size	63 Vehicles
Extent of System	154 Directional Route Miles
Span of Service	16 Hours

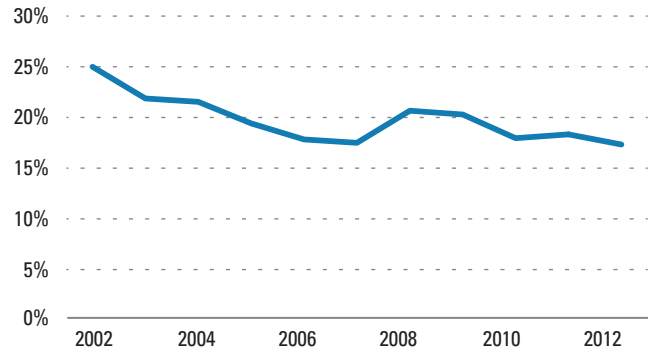
GMBL FIXED ROUTE

LOS ANGELES COUNTY

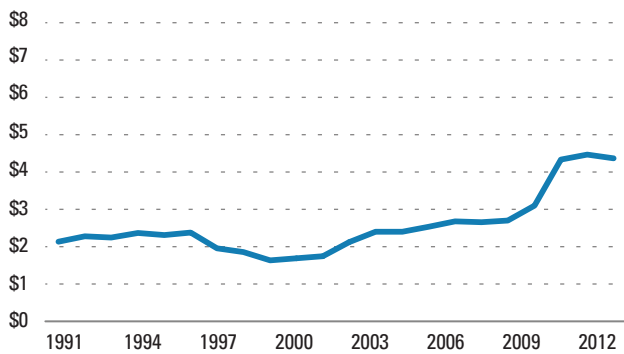
Cost per Service Hour



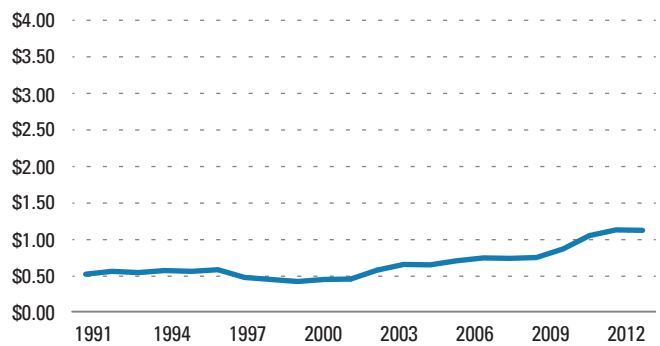
Farebox Recovery



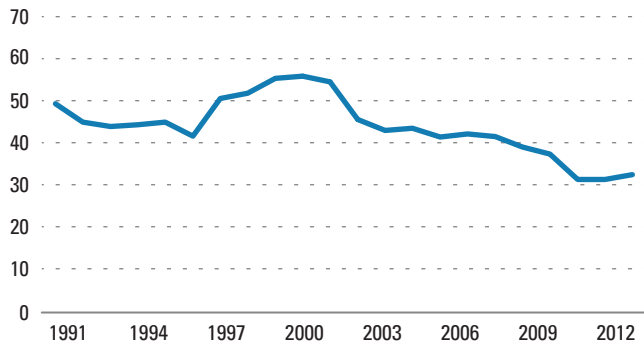
Cost per Passenger Trip



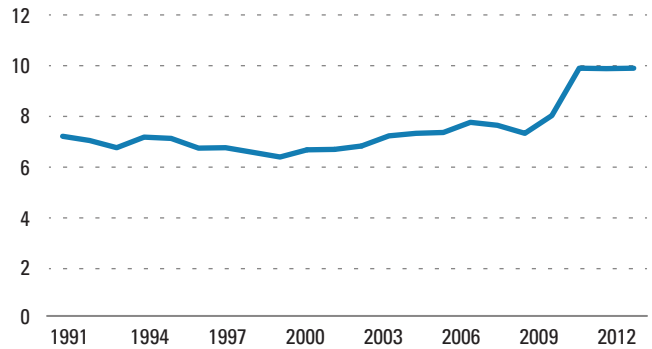
Cost per Passenger Mile



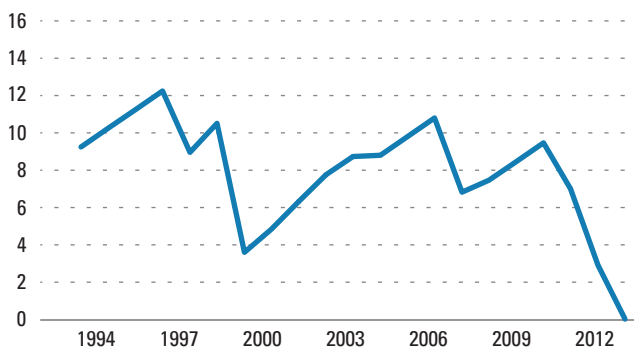
Passengers per Service Hour



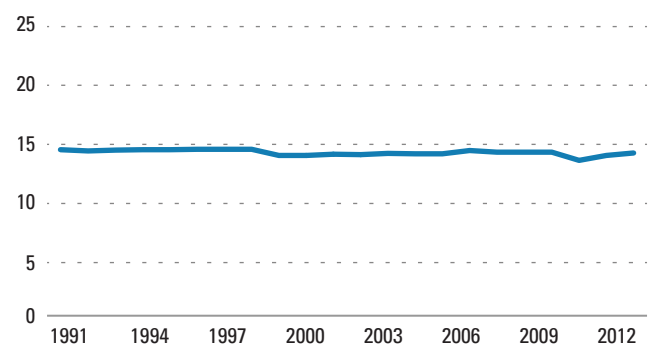
Passengers per Service Mile



Fleet Average Vehicle Age



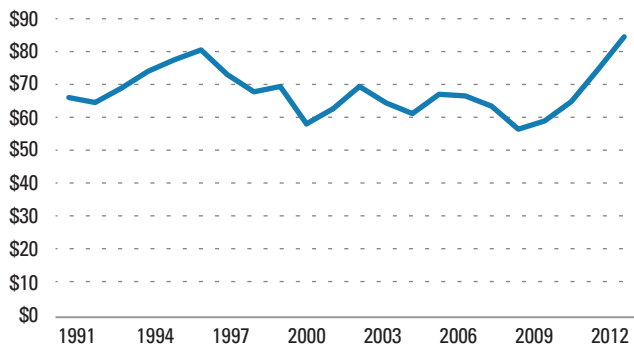
Average Vehicle Speed, in Miles per Hour



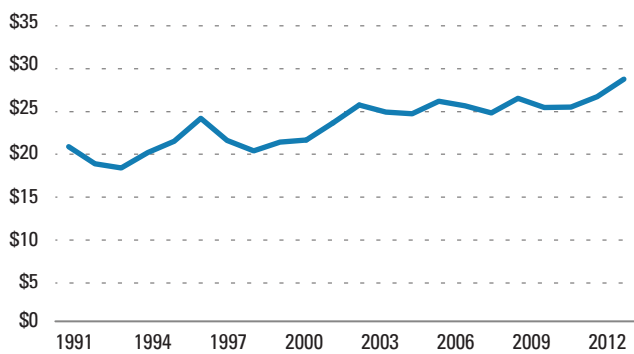
\*Source: NTD 2012

## GMBL DEMAND RESPONSE

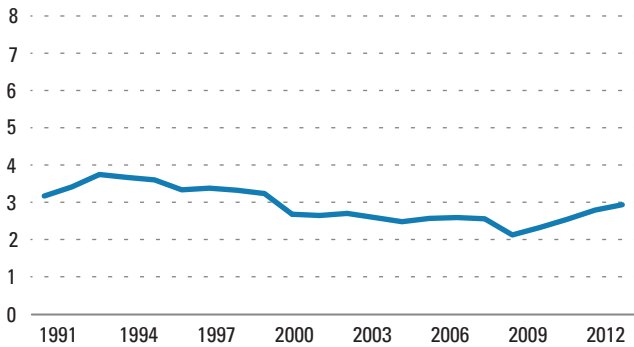
## Cost per Service Hour



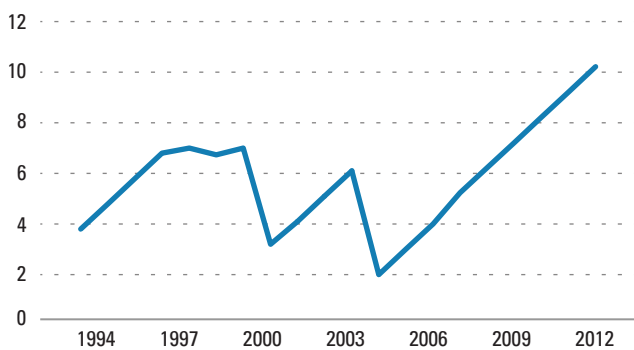
## Cost per Passenger Trip



## Passengers per Service Hour



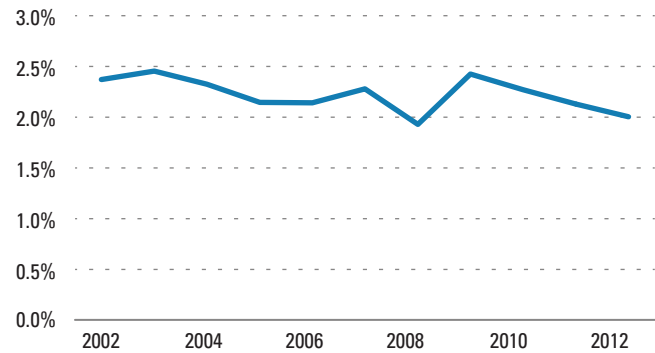
## Fleet Average Vehicle Age



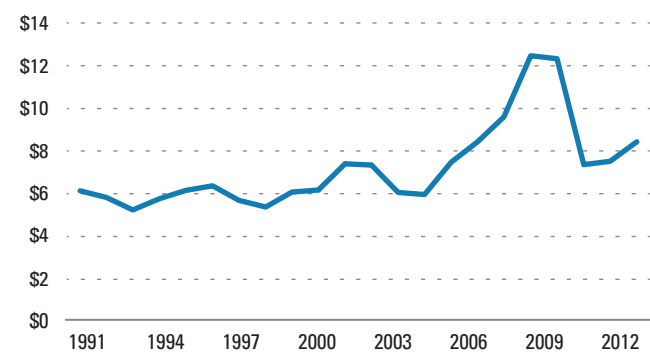
\*Source: NTD 2012

## LOS ANGELES COUNTY

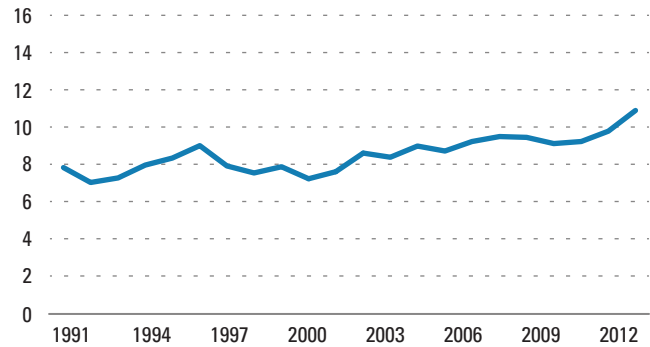
## Farebox Recovery



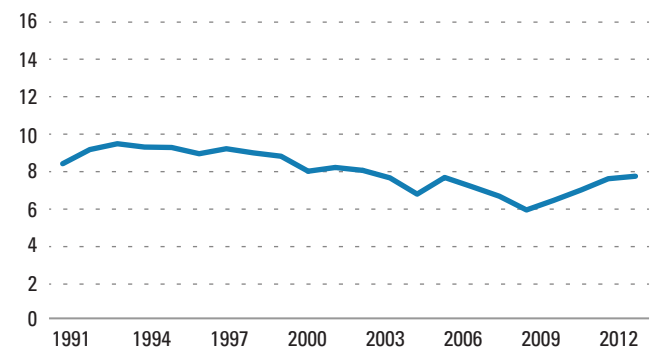
## Cost per Passenger Mile



## Passengers per Service Mile



## Average Vehicle Speed, in Miles per Hour





LOS ANGELES COUNTY METROPOLITAN  
TRANSPORTATION AUTHORITY (METRO)

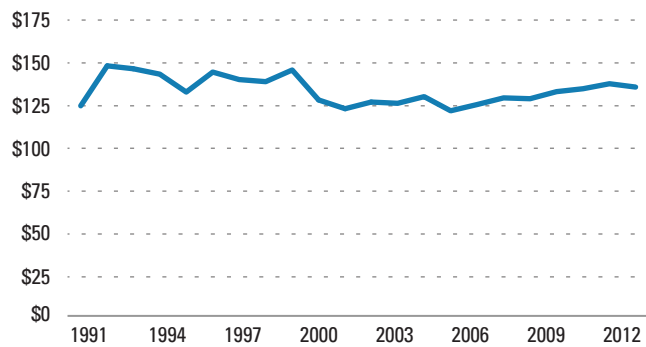


One Gateway Plaza  
Los Angeles, CA 90012-2952  
<http://www.metro.net>

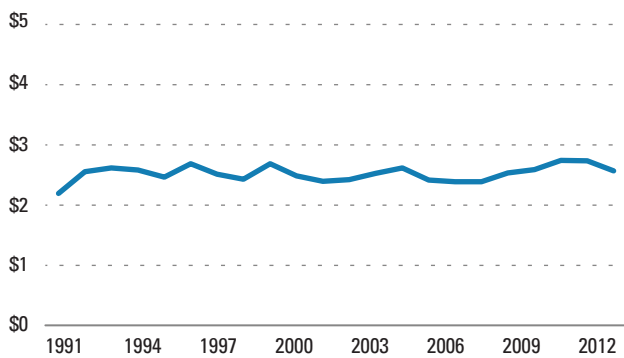
<b>Governance Structure</b>	County Transportation Commission and State Designated Transit District
<b>Base Fare</b>	\$1.50
<b>Day Pass</b>	\$5
<b>Monthly Pass</b>	\$75
<b>Total Operating Budget</b>	\$ 1,410,474,629
<b>Capital Expenditures</b>	\$ 743,434,928
<b>Annual Service Provided</b>	8,172,449 Hours
<b>Service Area</b>	1513 Square Miles
<b>Fleet Size</b>	3761 Vehicles
<b>Extent of System</b>	3924 Directional Route Miles
<b>Span of Service</b>	24 Hours

## METRO FIXED ROUTE

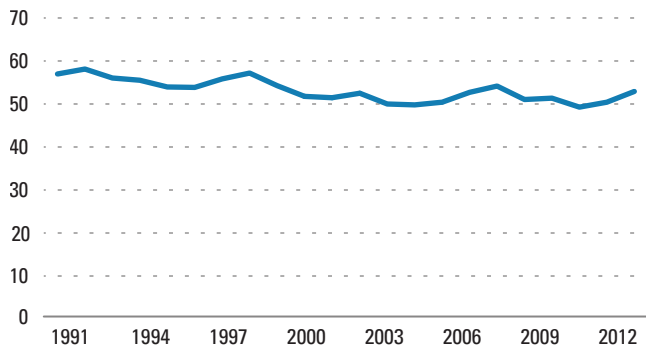
## Cost per Service Hour



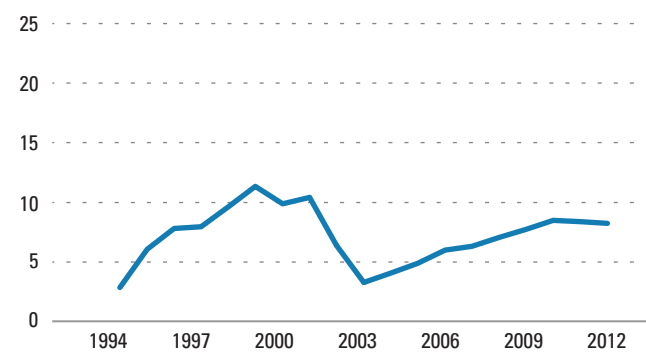
## Cost per Passenger Trip



## Passengers per Service Hour



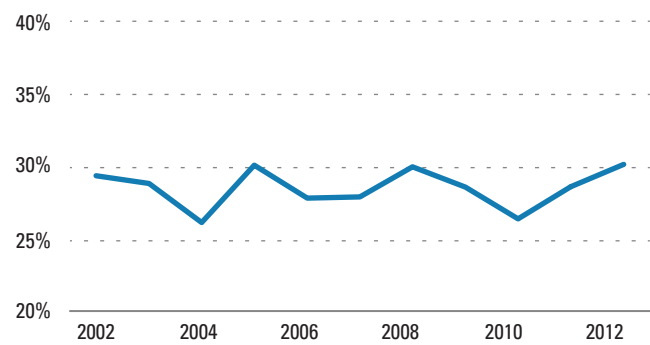
## Fleet Average Vehicle Age



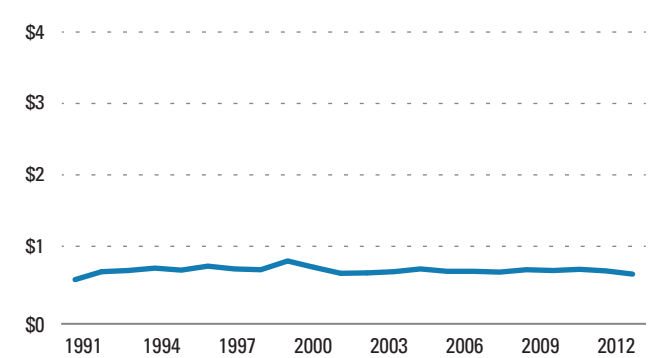
\*Source: NTD 2012

## LOS ANGELES COUNTY

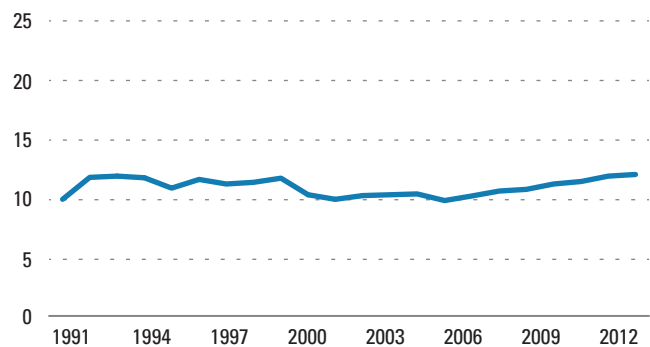
## Farebox Recovery



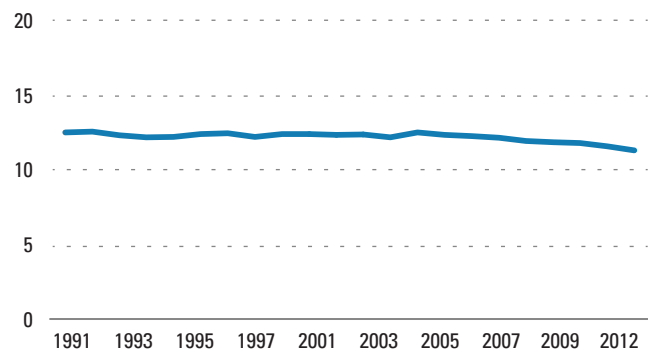
## Cost per Passenger Mile



## Passengers per Service Mile



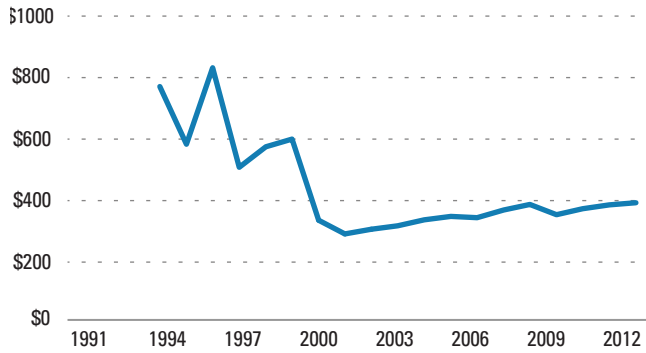
## Average Vehicle Speed, in Miles per Hour



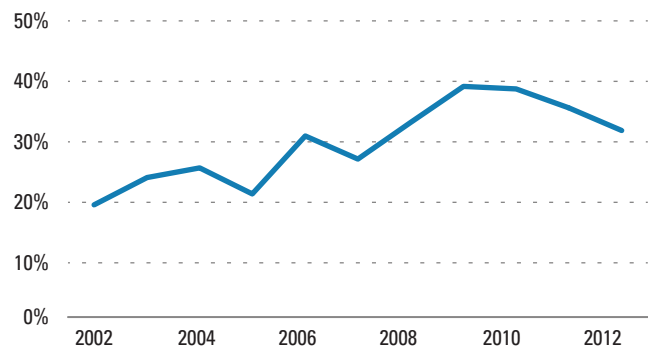
## METRO HEAVY RAIL

## LOS ANGELES COUNTY

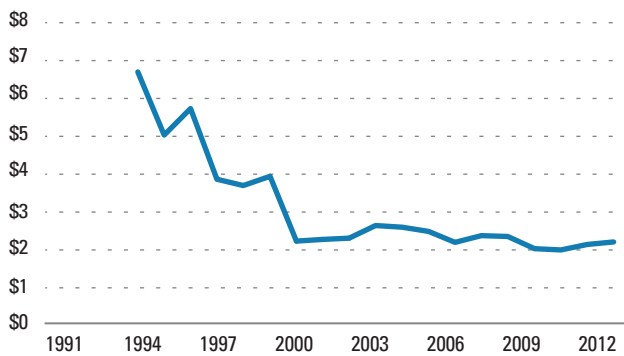
### Cost per Service Hour



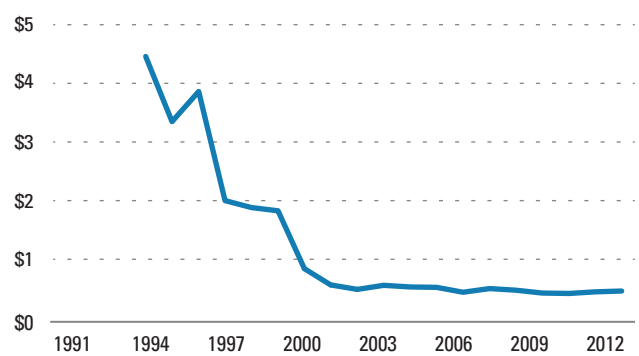
### Farebox Recovery



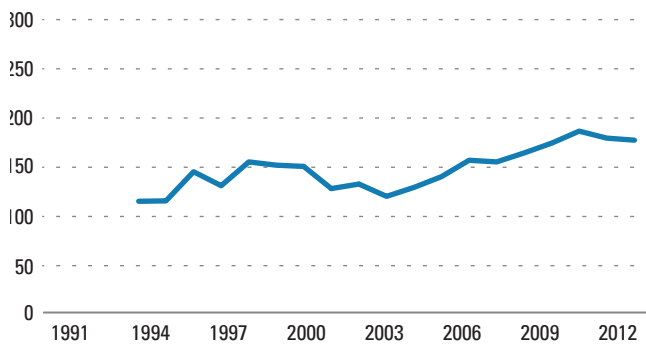
### Cost per Passenger Trip



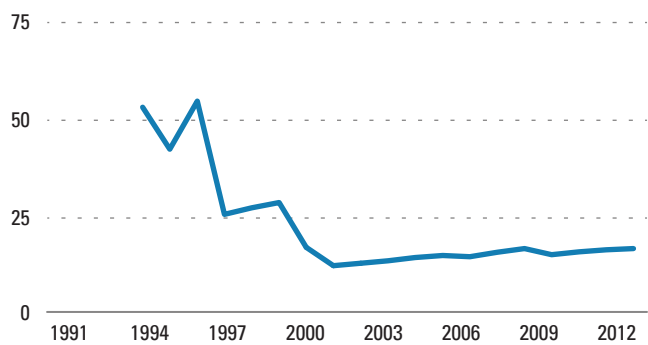
### Cost per Passenger Mile



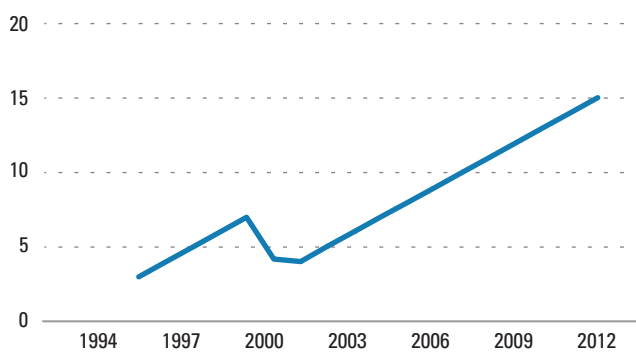
### Passengers per Service Hour



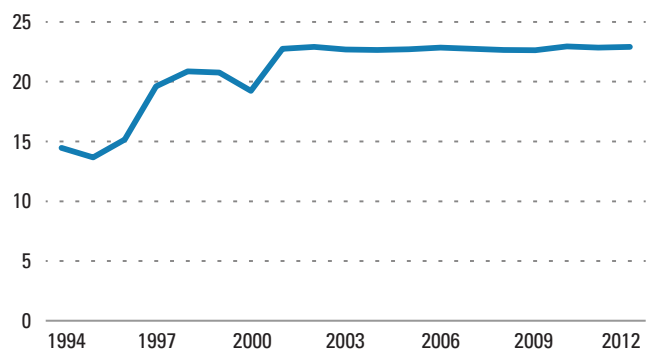
### Passengers per Service Mile



### Fleet Average Vehicle Age



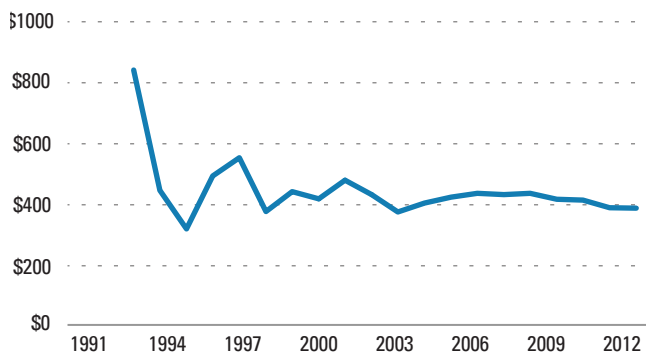
### Average Vehicle Speed, in Miles per Hour



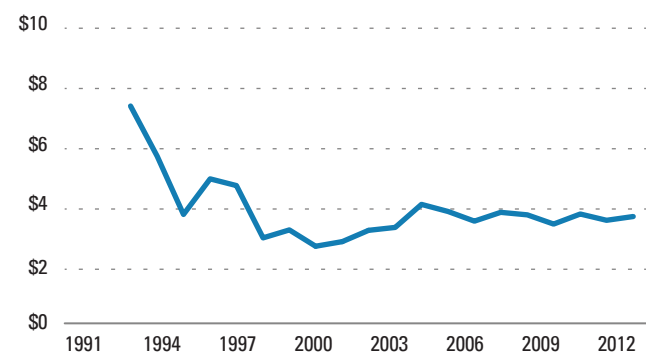
\*Source: NTD 2012

## METRO LIGHT RAIL

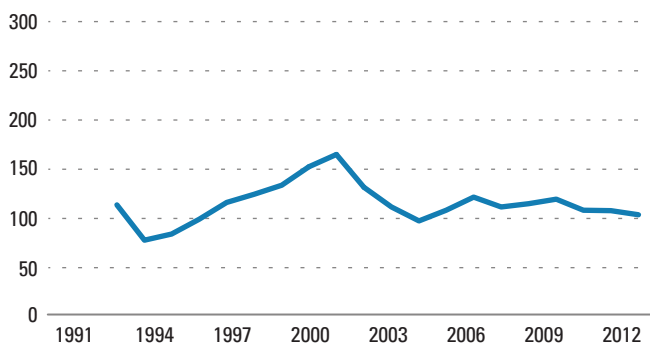
## Cost per Service Hour



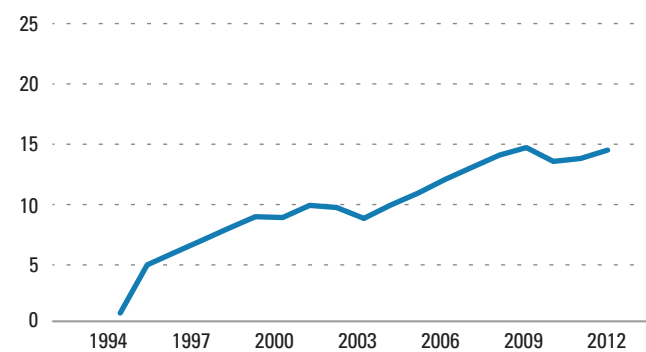
## Cost per Passenger Trip



## Passengers per Service Hour

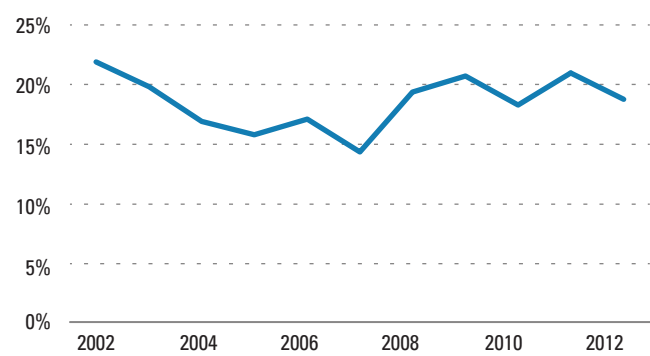


## Fleet Average Vehicle Age

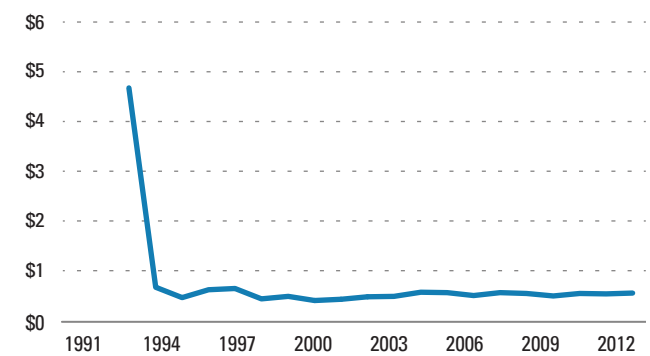


## LOS ANGELES COUNTY

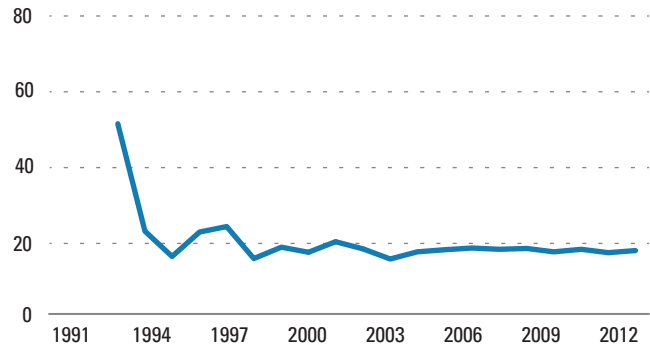
## Farebox Recovery



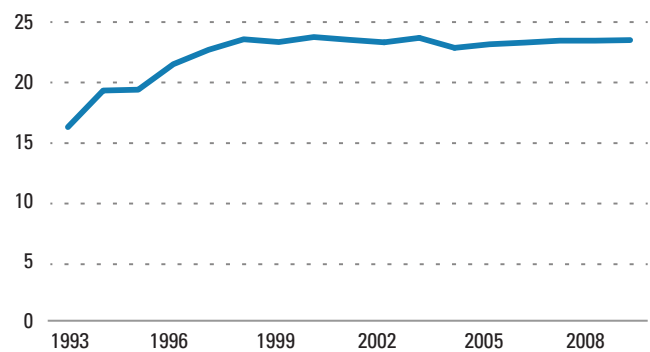
## Cost per Passenger Mile



## Passengers per Service Mile



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

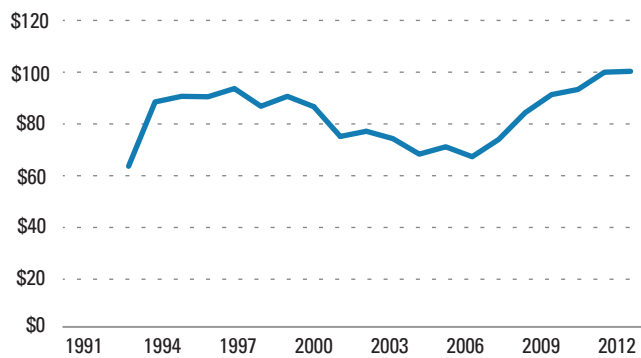
CITY OF LOS ANGELES DEPARTMENT  
OF TRANSPORTATION (LADOT)

100 S Main St, 10th Floor  
Los Angeles, CA 90012  
<http://www.ladottransit.com>

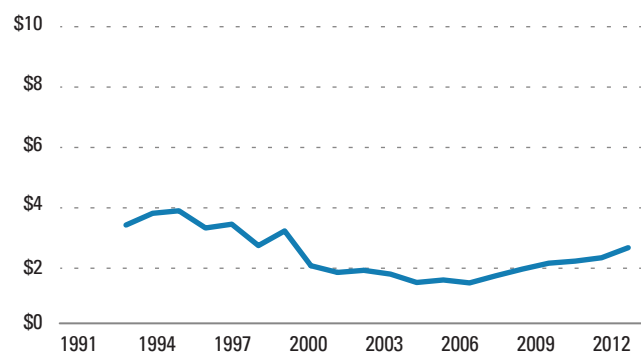
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$0.50
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	\$18
<b>Total Operating Budget</b>	\$ 74,764,677
<b>Capital Expenditures</b>	\$ 78,299,892
<b>Annual Service Provided</b>	777,805 Hours
<b>Service Area</b>	465 Square Miles
<b>Fleet Size</b>	450 Vehicles
<b>Extent of System</b>	1850 Directional Route Miles
<b>Span of Service</b>	16 Hours

## LADOT FIXED ROUTE

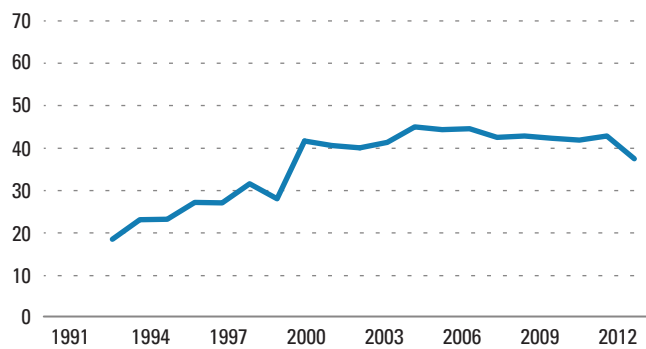
## Cost per Service Hour



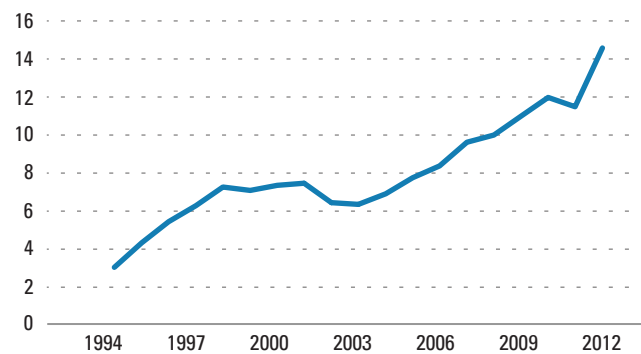
## Cost per Passenger Trip



## Passengers per Service Hour

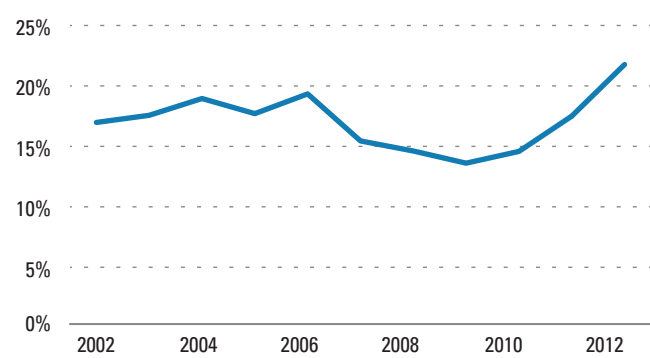


## Fleet Average Vehicle Age

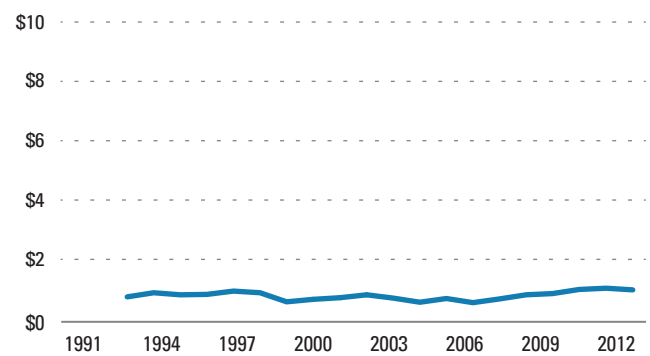


## LOS ANGELES COUNTY

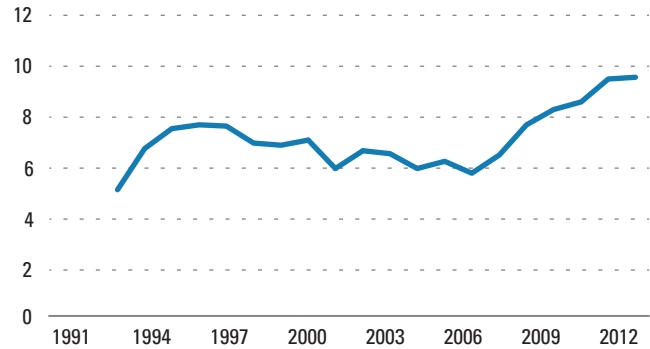
## Farebox Recovery



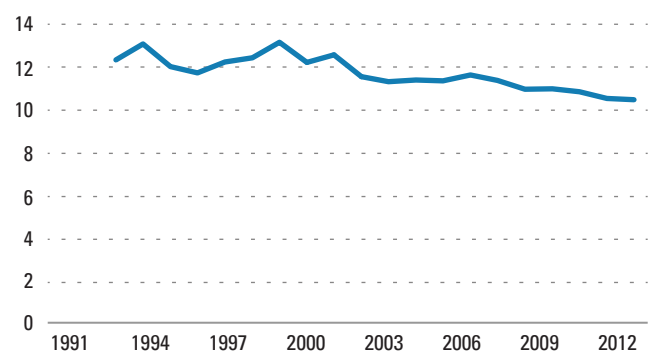
## Cost per Passenger Mile



## Passengers per Service Mile



## Average Vehicle Speed, in Miles per Hour

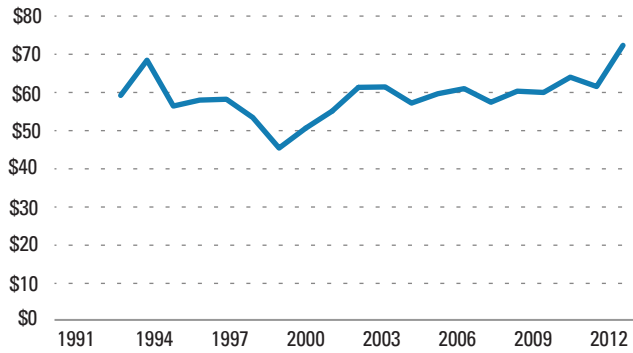


\*Source: NTD 2012

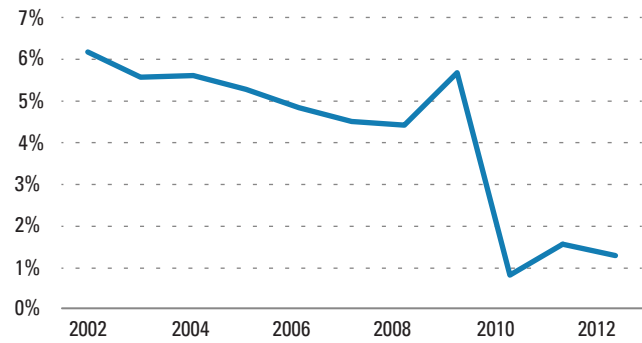
LADOT DEMAND RESPONSE

LOS ANGELES COUNTY

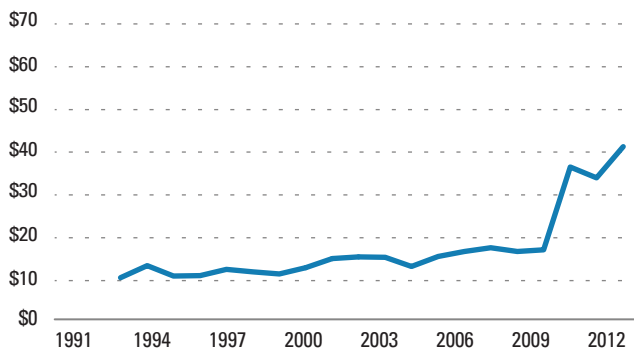
Cost per Service Hour



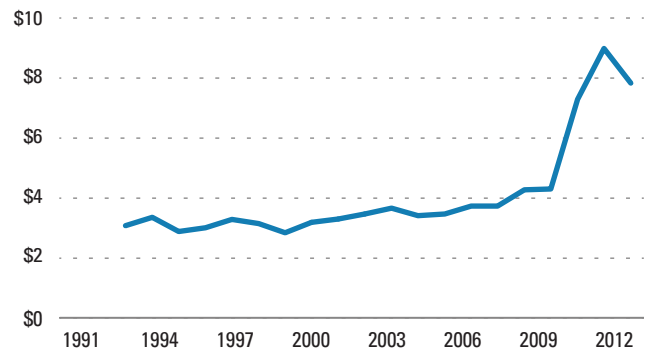
Farebox Recovery



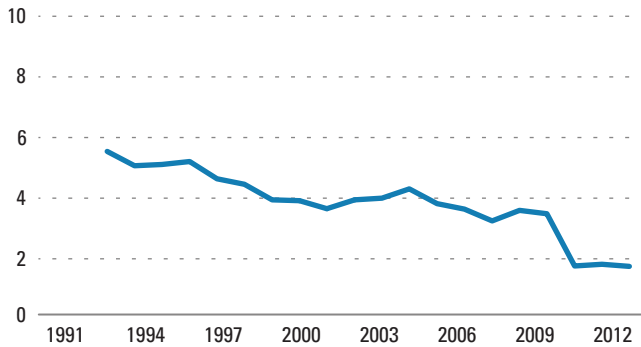
Cost per Passenger Trip



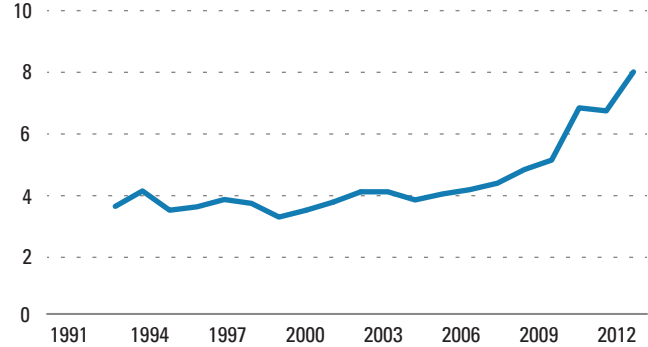
Cost per Passenger Mile



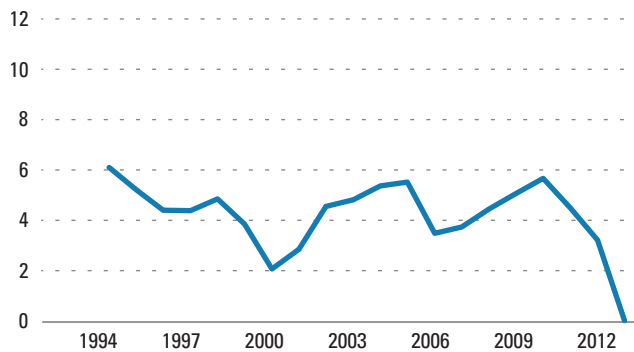
Passengers per Service Hour



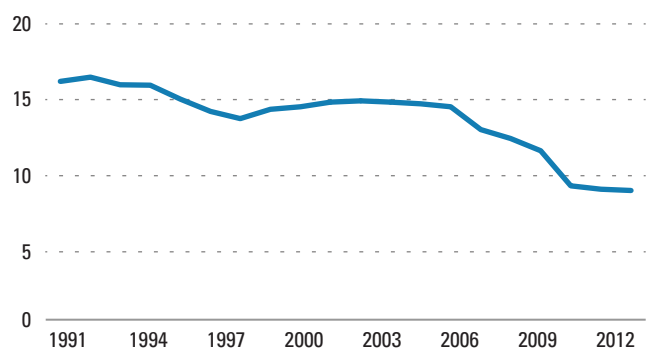
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012



## LONG BEACH TRANSIT (LBT)

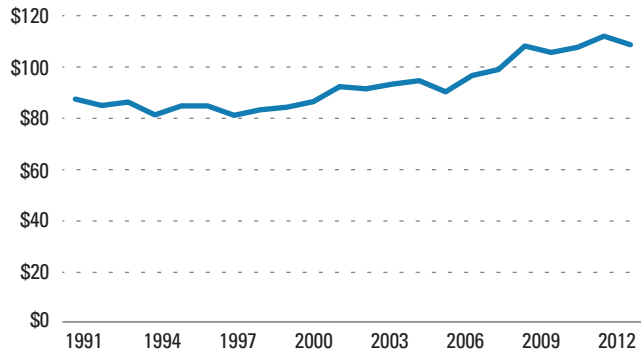


1963 East Anaheim Street Long Beach, CA 90801-0731 <a href="http://www.lbtransit.com">http://www.lbtransit.com</a>	
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1.25
<b>Day Pass</b>	\$4
<b>Monthly Pass</b>	\$65
<b>Total Operating Budget</b>	\$ 73,263,250
<b>Capital Expenditures</b>	\$ 13,490,448
<b>Annual Service Provided</b>	675,127 Hours
<b>Service Area</b>	98 Square Miles
<b>Fleet Size</b>	220 Vehicles
<b>Extent of System</b>	402 Directional Route Miles
<b>Span of Service</b>	19 Hours

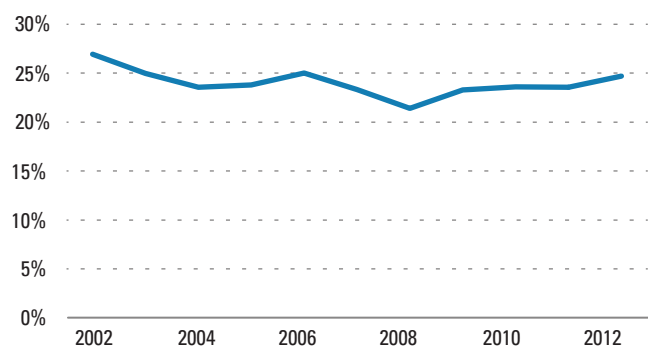
## LONG BEACH TRANSIT FIXED ROUTE

## LOS ANGELES COUNTY

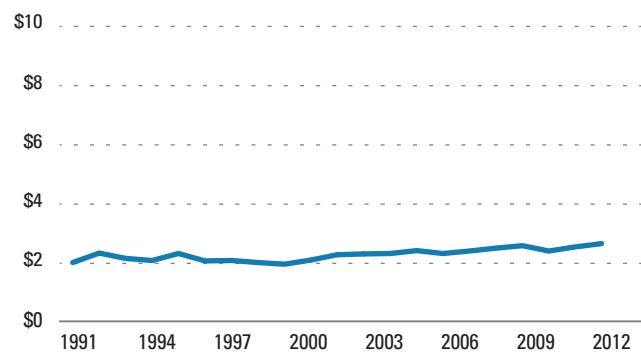
### Cost per Service Hour



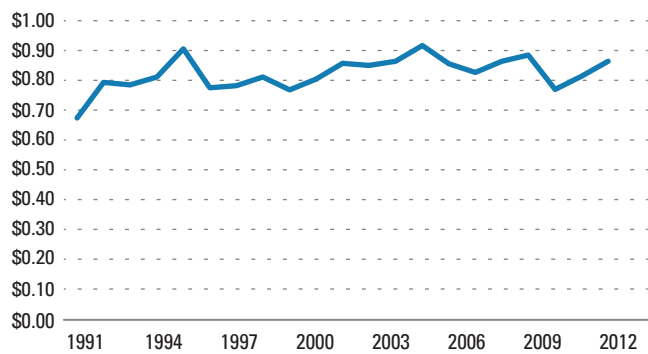
### Farebox Recovery



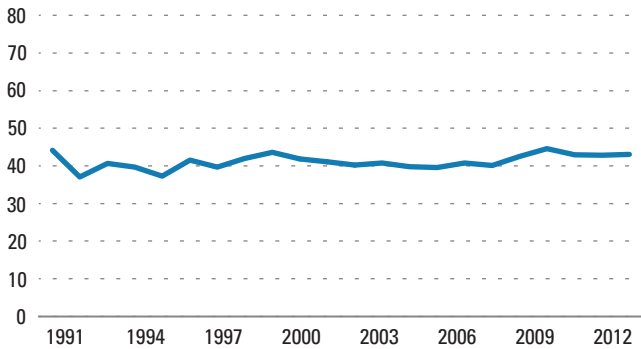
### Cost per Passenger Trip



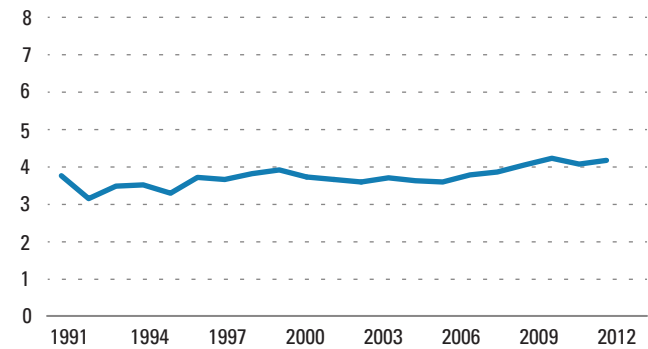
### Cost per Passenger Mile



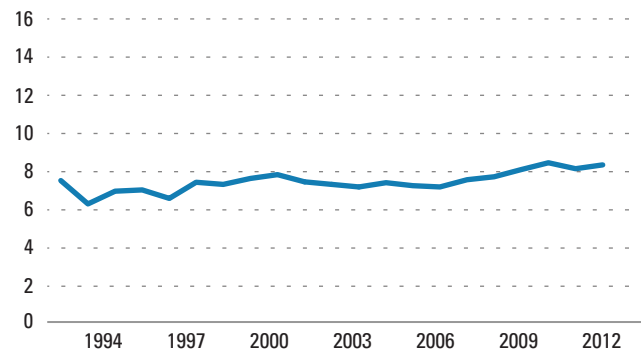
### Passengers per Service Hour



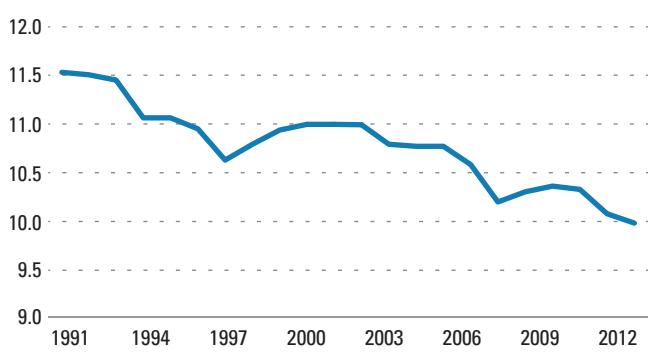
### Passengers per Service Mile



### Fleet Average Vehicle Age



### Average Vehicle Speed, in Miles per Hour

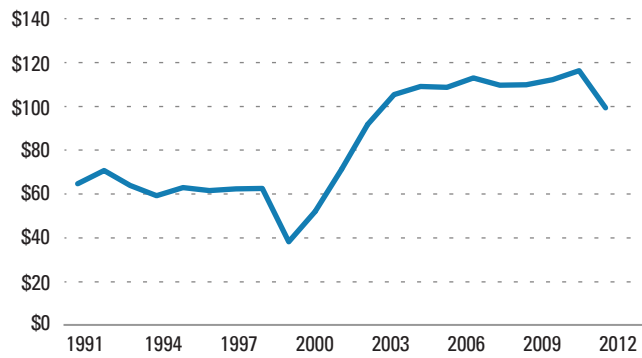


\*Source: NTD 2012

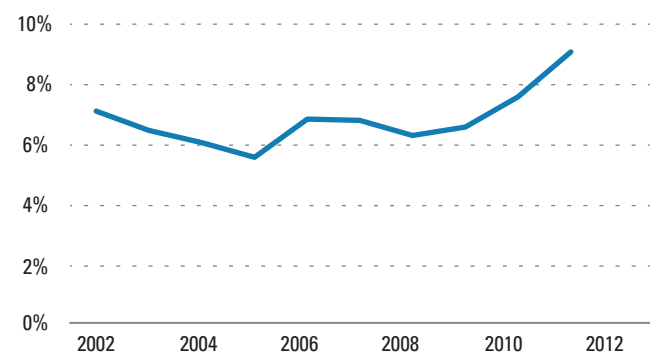
## LONG BEACH TRANSIT DEMAND RESPONSE

## LOS ANGELES COUNTY

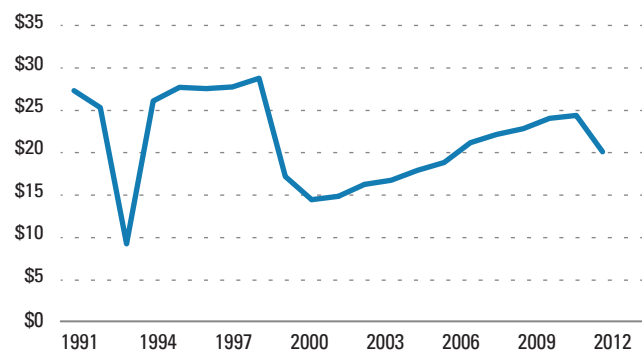
## Cost per Service Hour



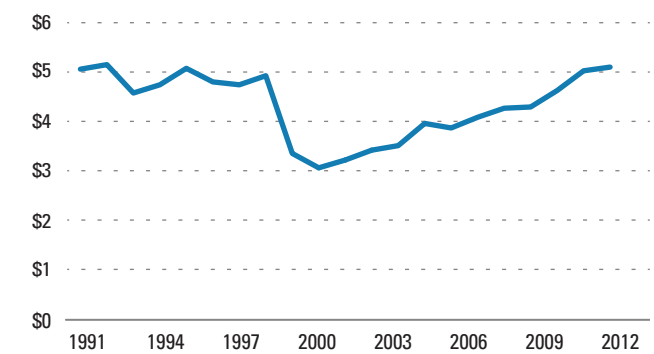
## Farebox Recovery



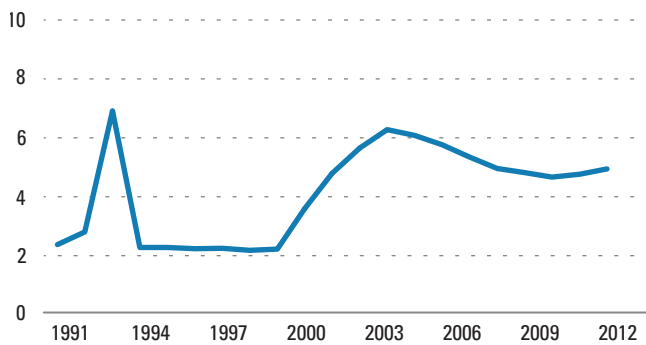
## Cost per Passenger Trip



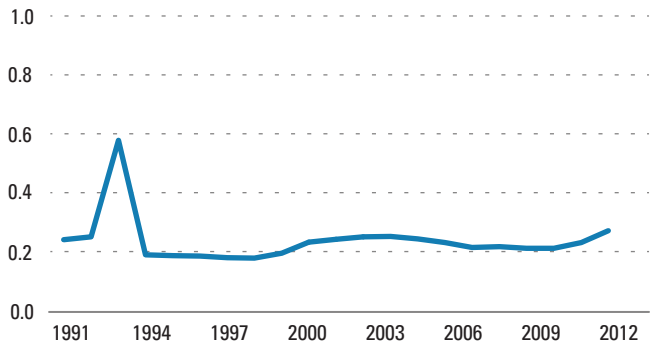
## Cost per Passenger Mile



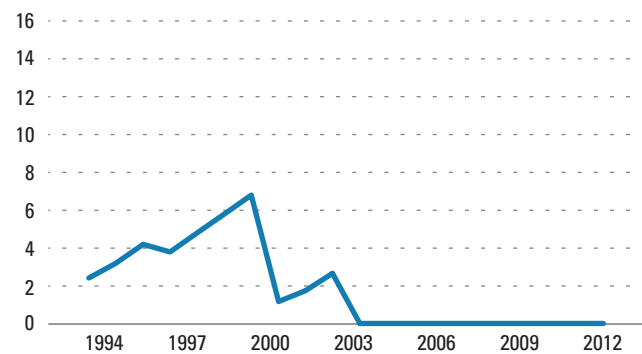
## Passengers per Service Hour



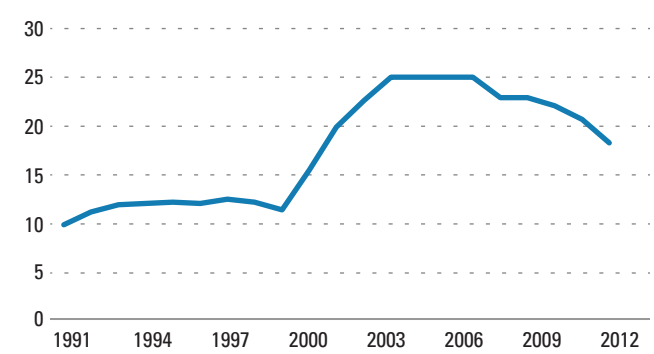
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## MONTEBELLO BUS LINES (MBL)

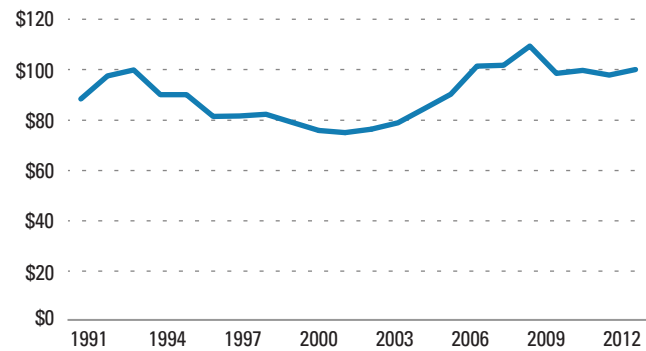


400 South Taylor Avenue  
 Montebello, CA 90640  
<http://www.cityofmontebello.com>

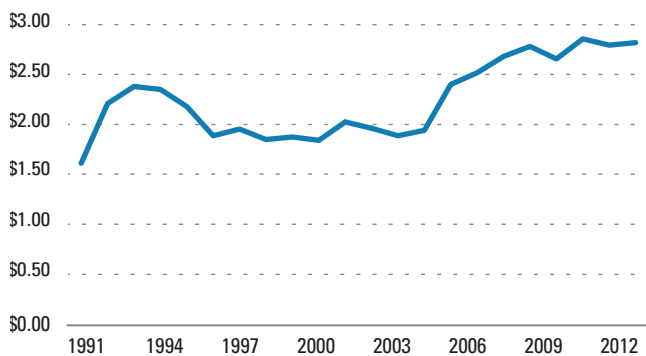
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1.10
<b>Day Pass</b>	\$3
<b>Monthly Pass</b>	N/A
<b>Total Operating Budget</b>	\$ 24,239,657
<b>Capital Expenditures</b>	\$ 5,108,094
<b>Annual Service Provided</b>	246,936 Hours
<b>Service Area</b>	151 Square Miles
<b>Fleet Size</b>	83 Vehicles
<b>Extent of System</b>	263 Directional Route Miles
<b>Span of Service</b>	18 Hours

## MONTEBELLO BUS LINES FIXED ROUTE

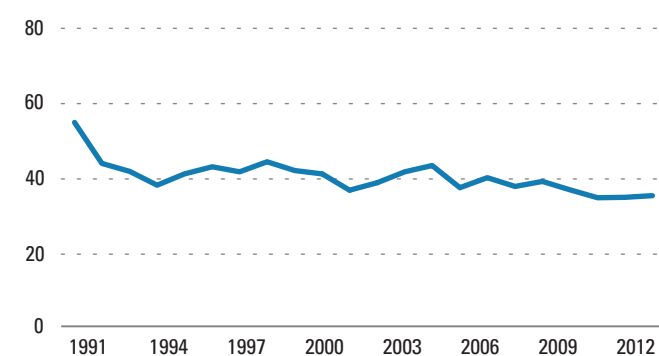
## Cost per Service Hour



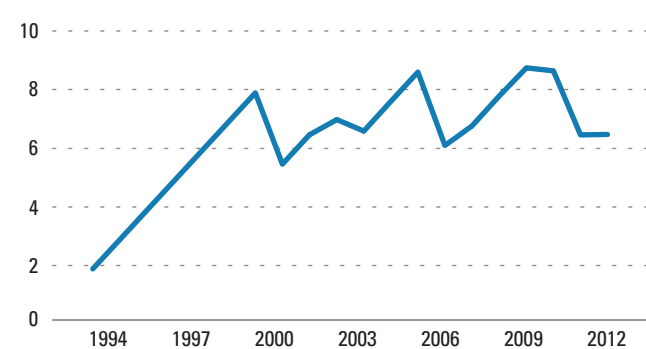
## Cost per Passenger Trip



## Passengers per Service Hour

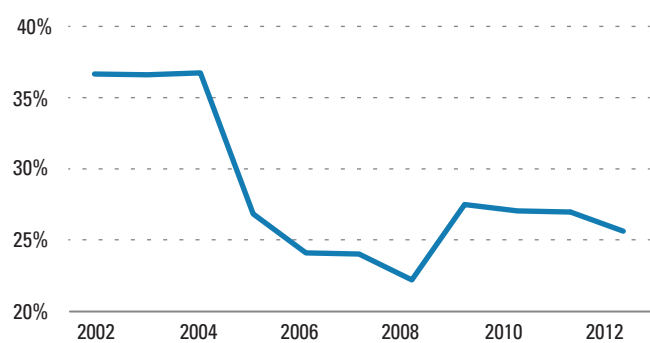


## Fleet Average Vehicle Age

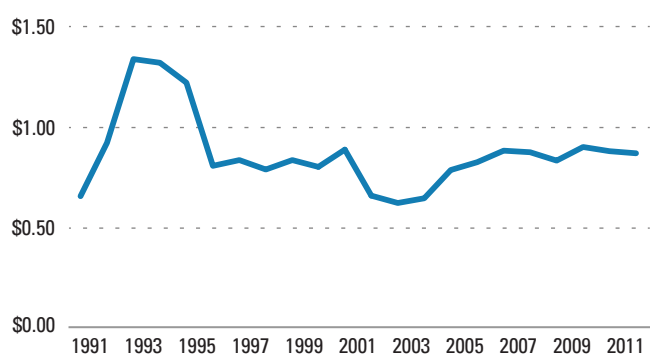


## LOS ANGELES COUNTY

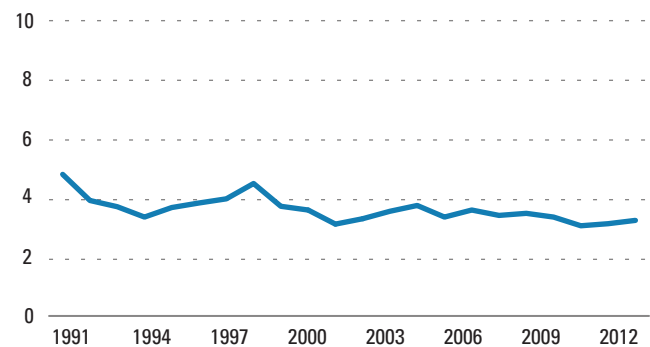
## Farebox Recovery



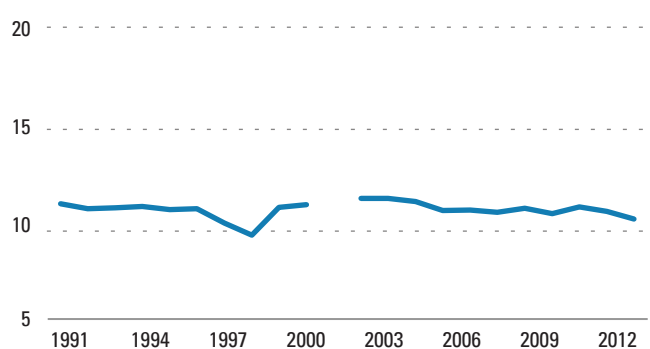
## Cost per Passenger Mile



## Passengers per Service Mile



## Average Vehicle Speed, in Miles per Hour

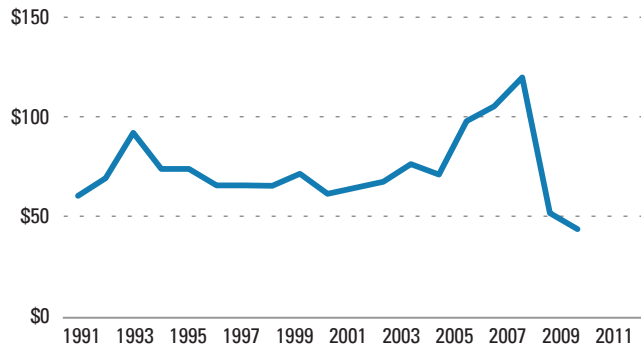


\*Source: NTD 2012

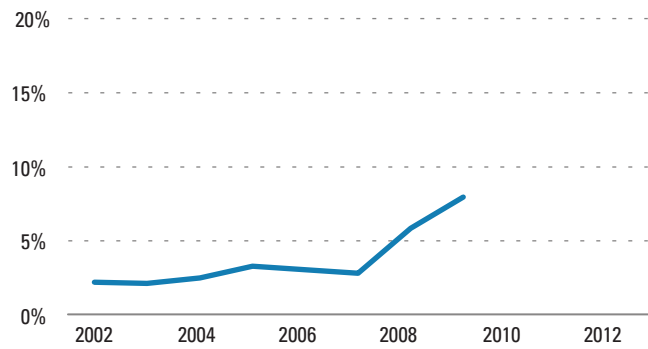
MONTEBELLO BUS LINES DEMAND RESPONSE

LOS ANGELES COUNTY

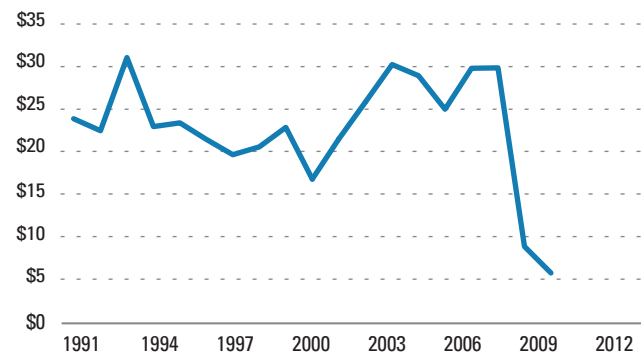
Cost per Service Hour



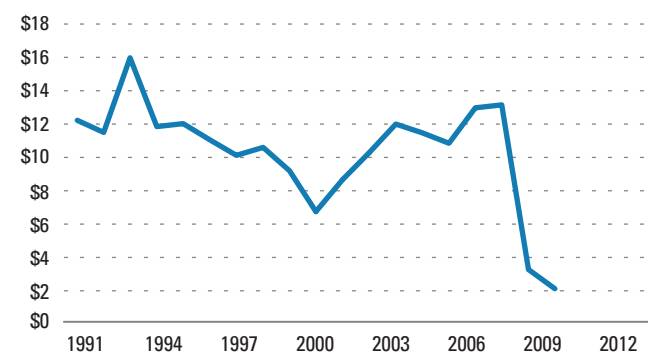
Farebox Recovery



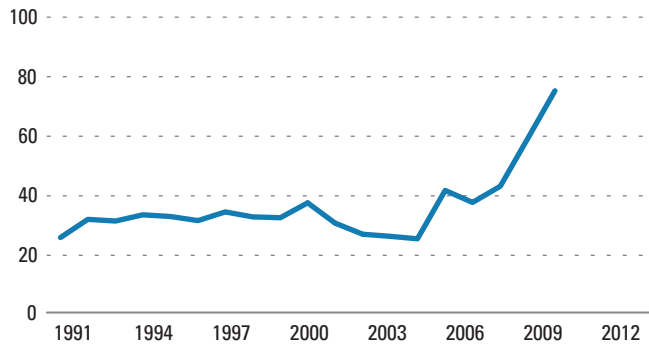
Cost per Passenger Trip



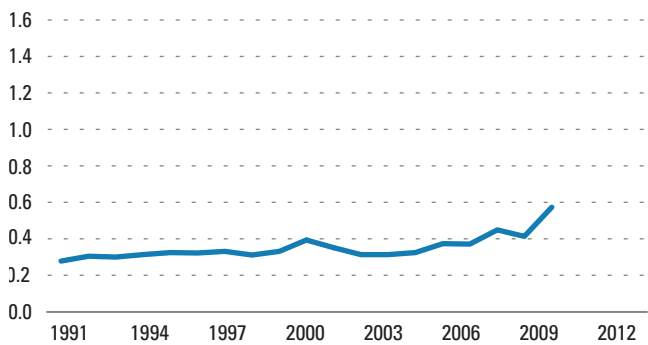
Cost per Passenger Mile



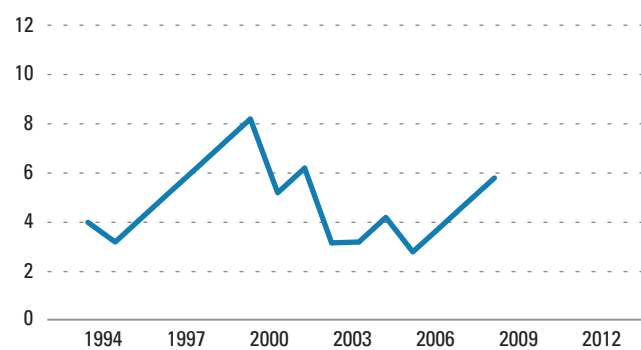
Passengers per Service Hour



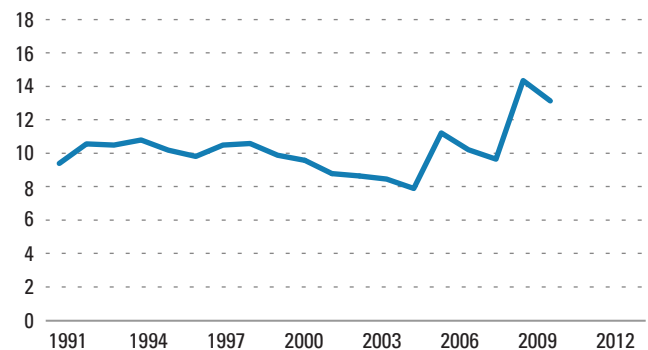
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## NORWALK TRANSIT SYSTEM (NTS)



12650 E Imperial Highway  
Norwalk, CA 90650  
<http://www.ci.norwalk.ca.us>

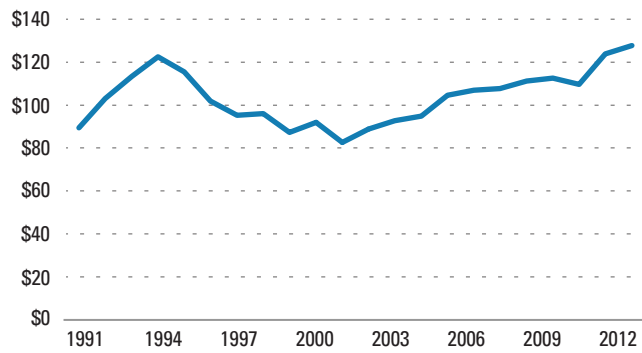
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1.10
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	N/A
<b>Total Operating Budget</b>	\$ 11,558,910
<b>Capital Expenditures</b>	\$ 579,349,000
<b>Annual Service Provided</b>	93,205 Hours
<b>Service Area</b>	37 Square Miles
<b>Fleet Size</b>	42 Vehicles
<b>Extent of System</b>	158 Directional Route Miles
<b>Span of Service</b>	19.5 Hours



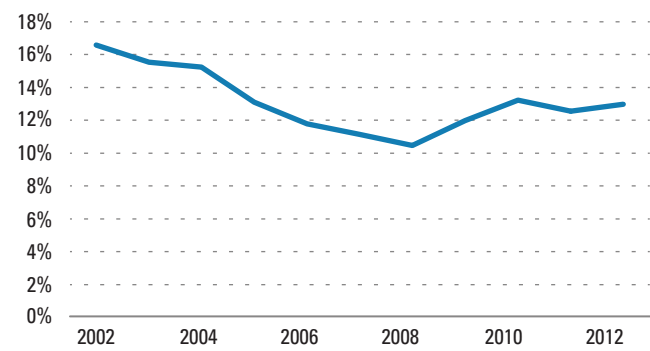
## NORWALK TRANSIT SYSTEM FIXED ROUTE

## LOS ANGELES COUNTY

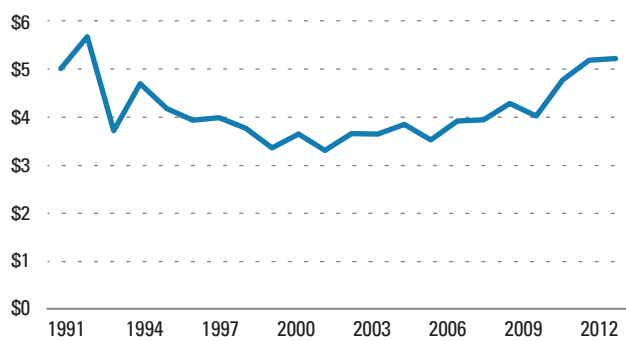
## Cost per Service Hour



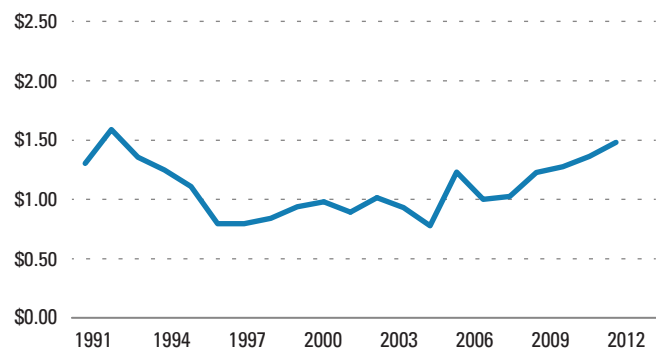
## Farebox Recovery



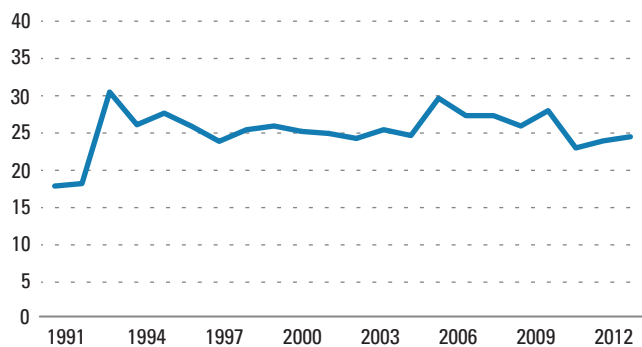
## Cost per Passenger Trip



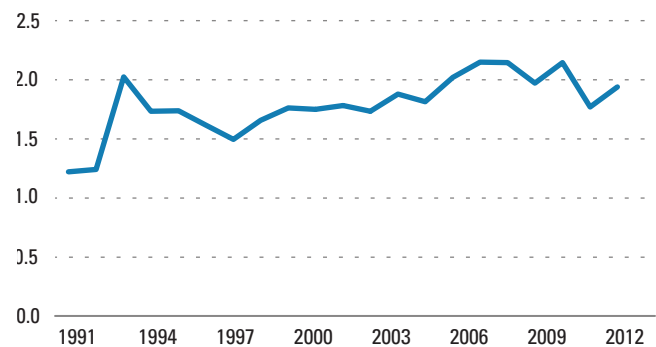
## Cost per Passenger Mile



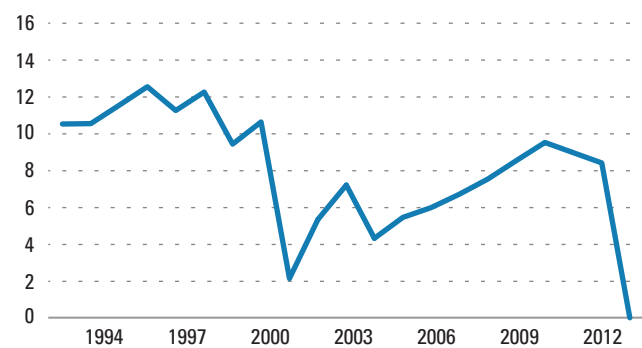
## Passengers per Service Hour



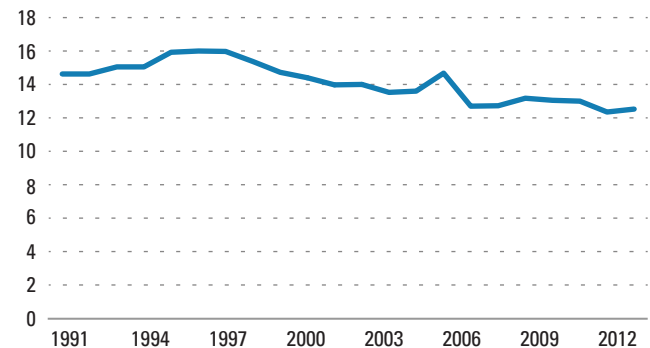
## Passengers per Service Mile



## Fleet Average Vehicle Age



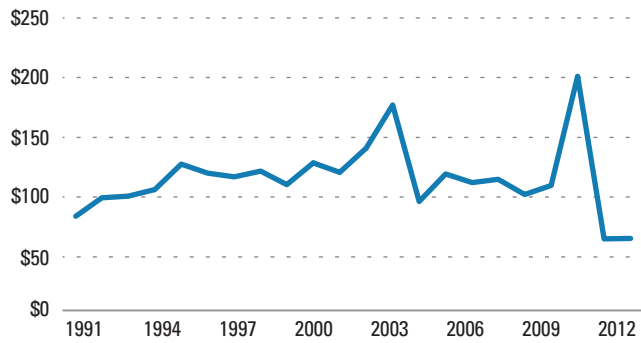
## Average Vehicle Speed, in Miles per Hour



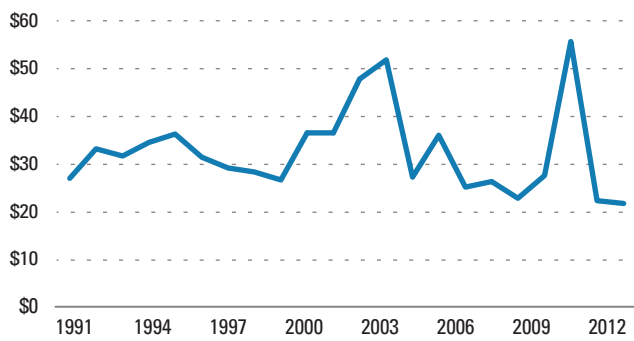
\*Source: NTD 2012

## NORWALK TRANSIT SYSTEM DEMAND RESPONSE

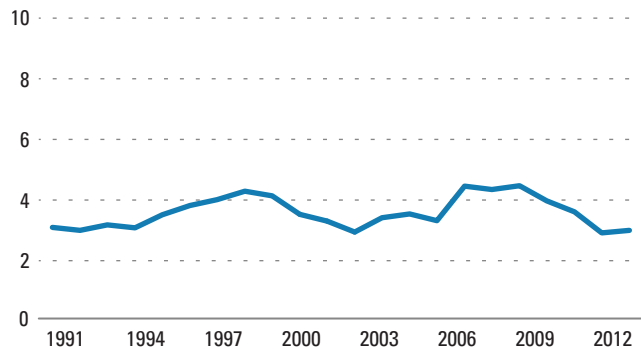
## Cost per Service Hour



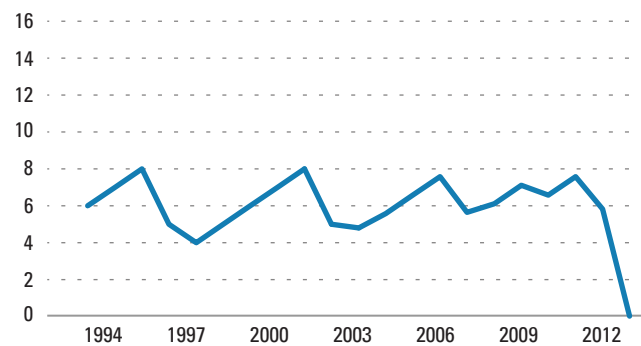
## Cost per Passenger Trip



## Passengers per Service Hour

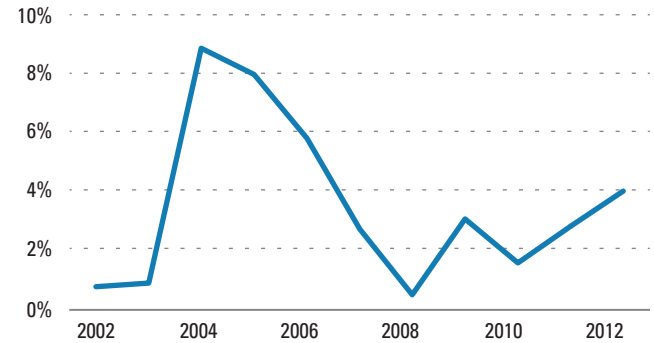


## Fleet Average Vehicle Age

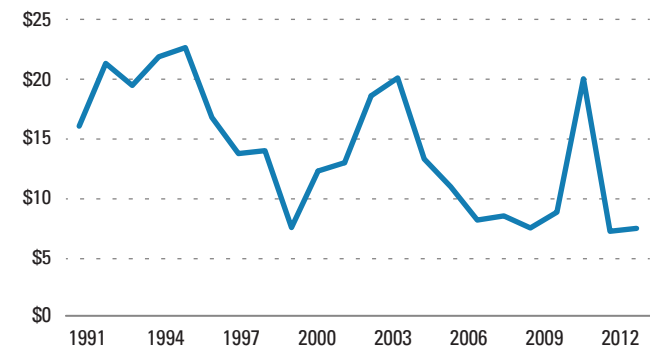


## LOS ANGELES COUNTY

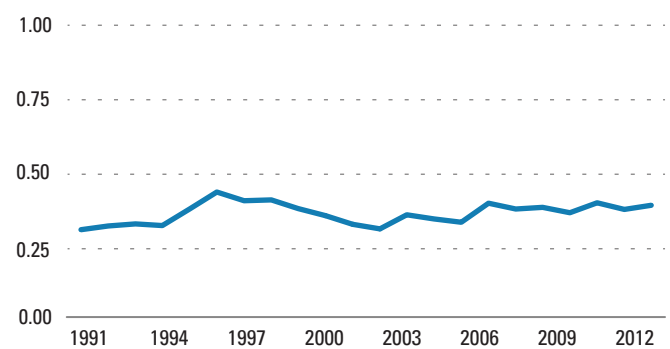
## Farebox Recovery



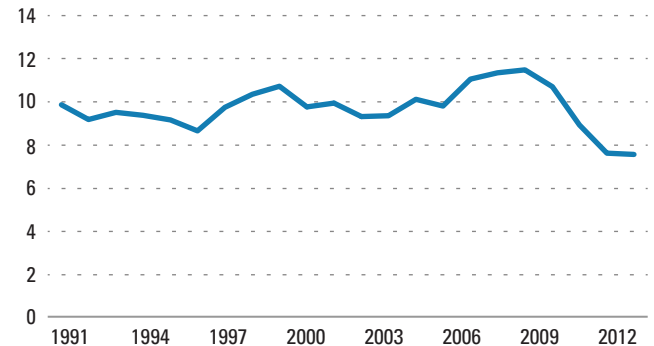
## Cost per Passenger Mile



## Passengers per Service Mile



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## SANTA CLARITA TRANSIT (SCT)

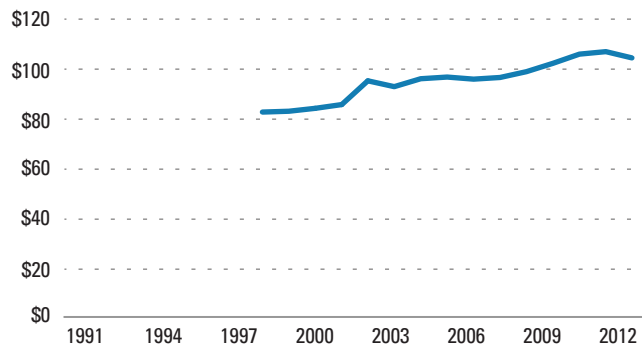


28250 Constellation Road Santa Clarita, CA 91355 <a href="http://www.santa-clarita.com">http://www.santa-clarita.com</a>	
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1
<b>Day Pass</b>	\$2.50
<b>Monthly Pass</b>	\$32
<b>Total Operating Budget</b>	\$ 20,998,899
<b>Capital Expenditures</b>	\$ 5,764,547
<b>Annual Service Provided</b>	209,909 Hours
<b>Service Area</b>	48 Square Miles
<b>Fleet Size</b>	109 Vehicles
<b>Extent of System</b>	592 Directional Route Miles
<b>Span of Service</b>	19 Hours

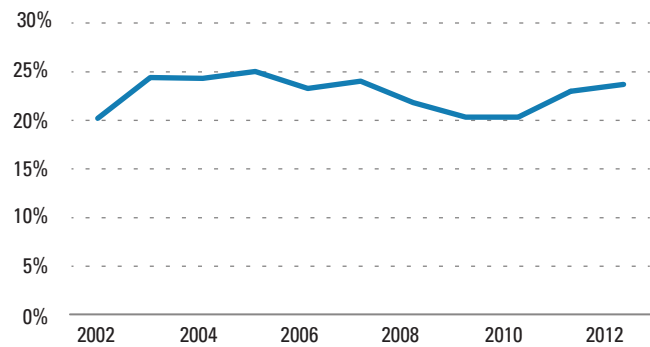
## SANTA CLARITA TRANSIT FIXED ROUTE

## LOS ANGELES COUNTY

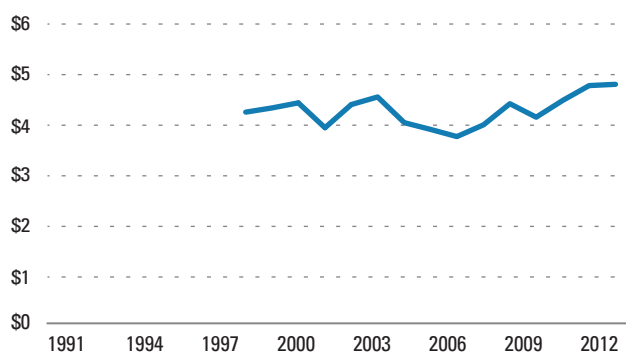
## Cost per Service Hour



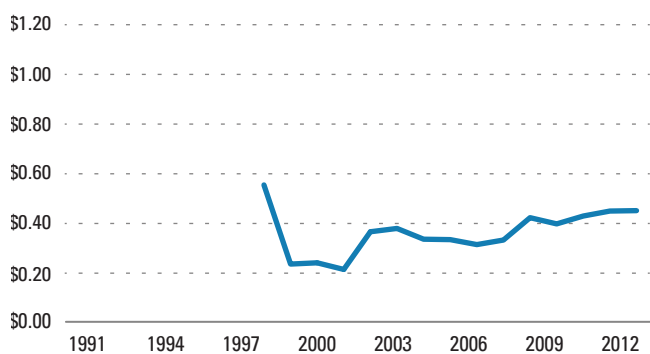
## Farebox Recovery



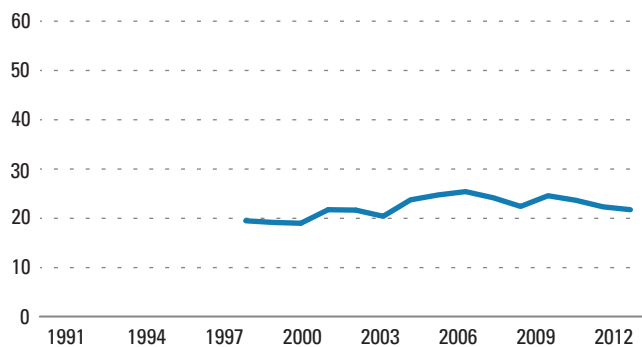
## Cost per Passenger Trip



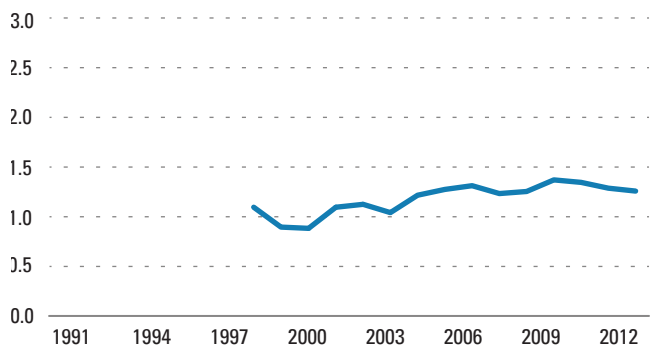
## Cost per Passenger Mile



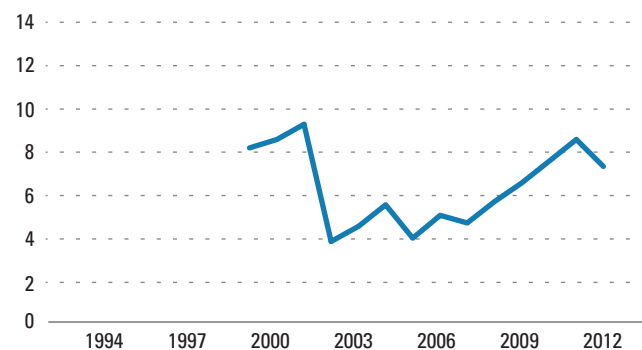
## Passengers per Service Hour



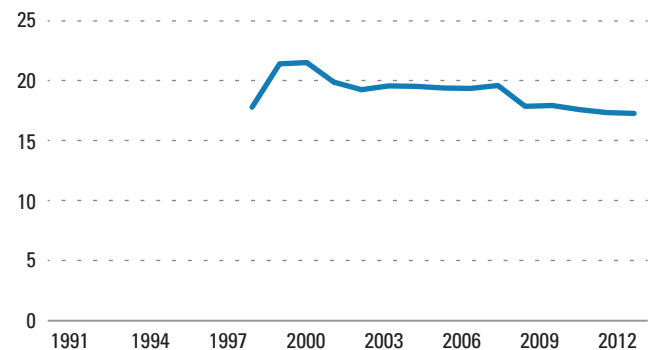
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour

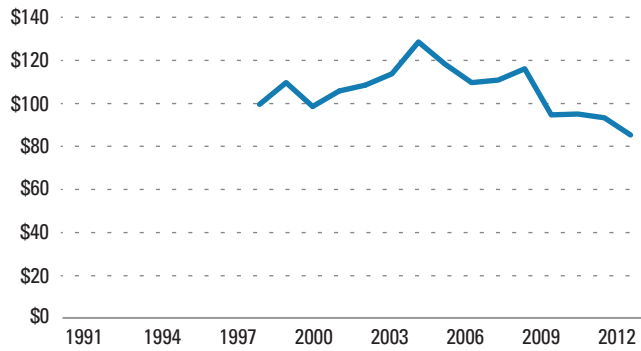


\*Source: NTD 2012

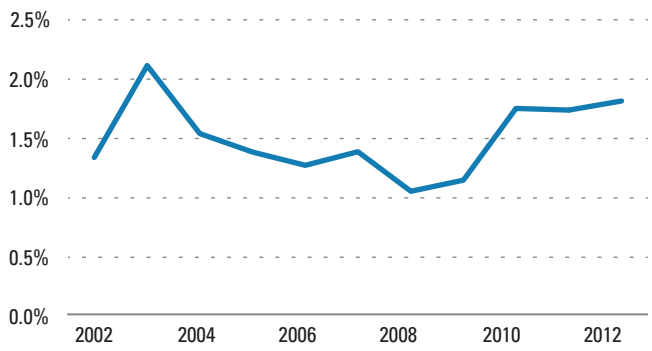
SANTA CLARITA TRANSIT DEMAND RESPONSE

LOS ANGELES COUNTY

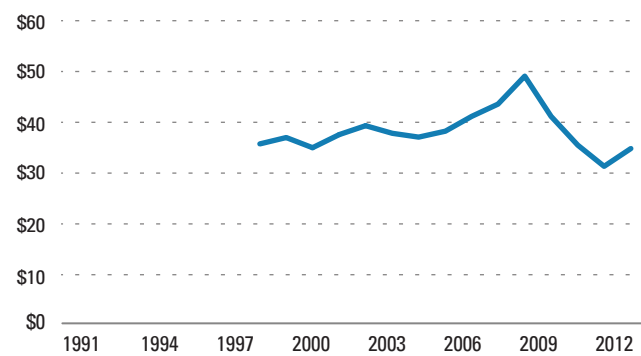
Cost per Service Hour



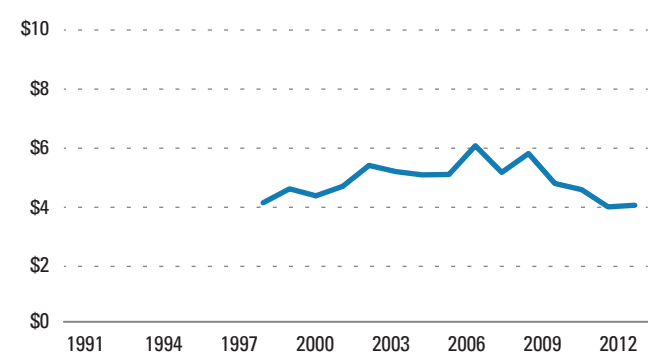
Farebox Recovery



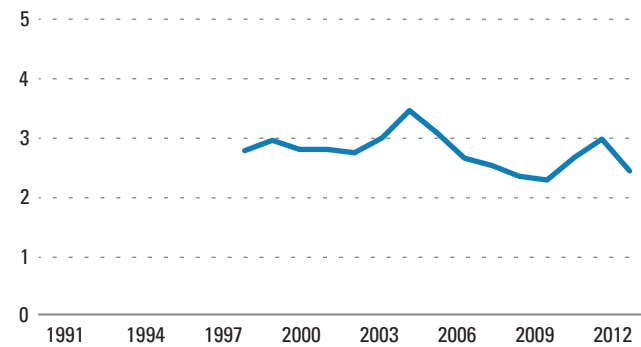
Cost per Passenger Trip



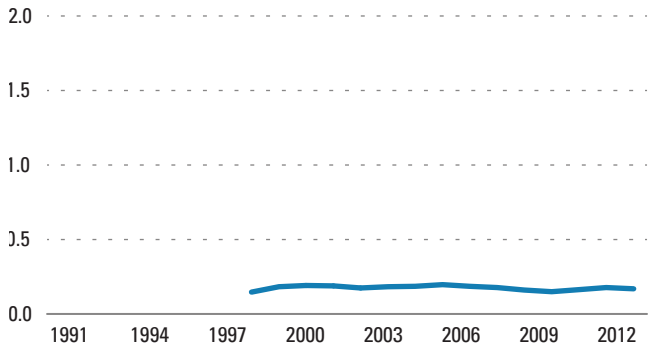
Cost per Passenger Mile



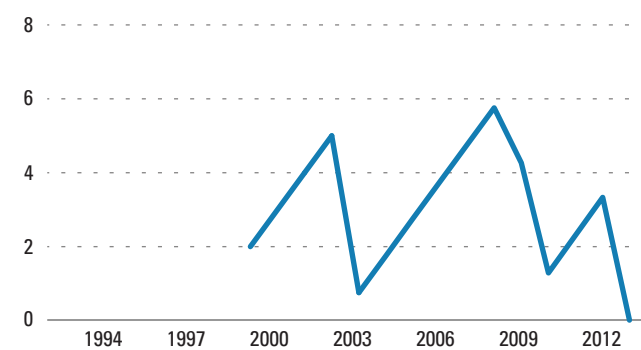
Passengers per Service Hour



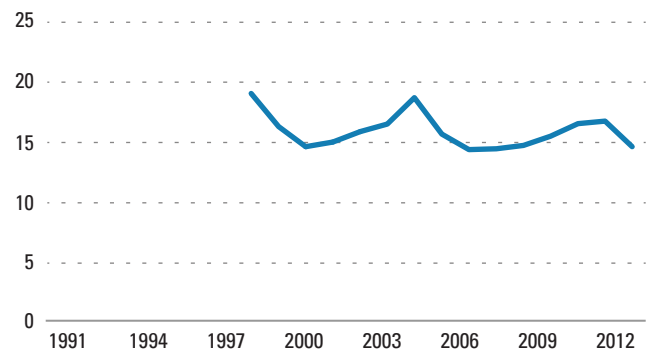
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

SANTA MONICA'S BIG BLUE BUS  
(BIG BLUE BUS)

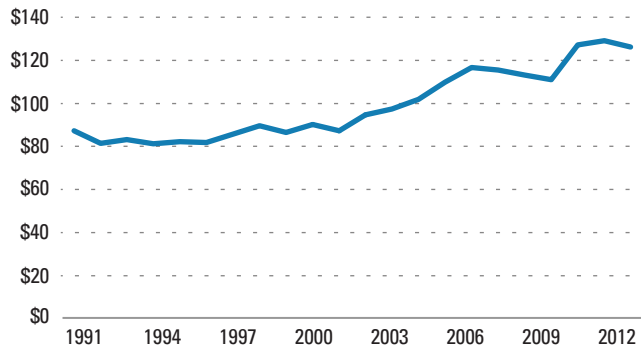


1660 Seventh Street Santa Monica, CA 90401-3324 <a href="http://www.bigbluebus.com">http://www.bigbluebus.com</a>	
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1
<b>Day Pass</b>	\$4
<b>Monthly Pass</b>	\$60
<b>Total Operating Budget</b>	\$ 64,278,710
<b>Capital Expenditures</b>	\$ 25,234,672
<b>Annual Service Provided</b>	508,213 Hours
<b>Service Area</b>	51 Square Miles
<b>Fleet Size</b>	218 Vehicles
<b>Extent of System</b>	211 Directional Route Miles
<b>Span of Service</b>	21 Hours

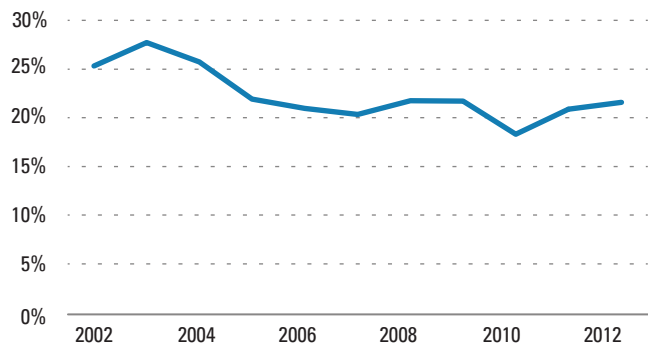
SANTA MONICA'S BIG BLUE BUS FIXED ROUTE

LOS ANGELES COUNTY

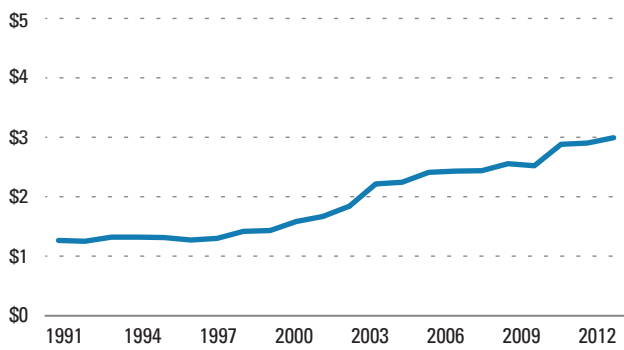
Cost per Service Hour



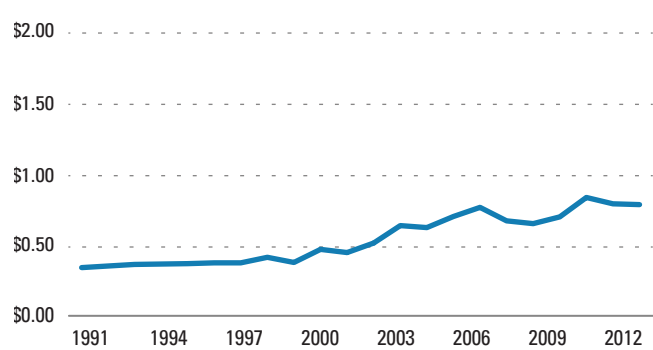
Farebox Recovery



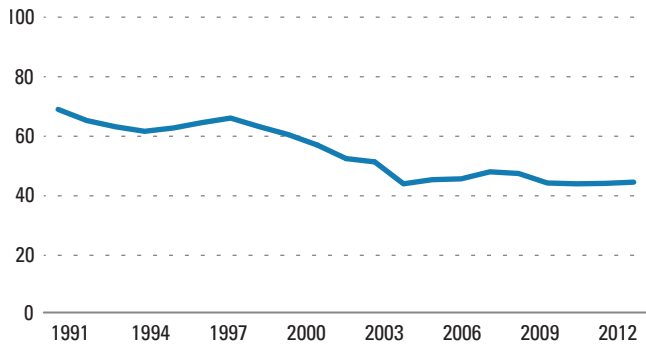
Cost per Passenger Trip



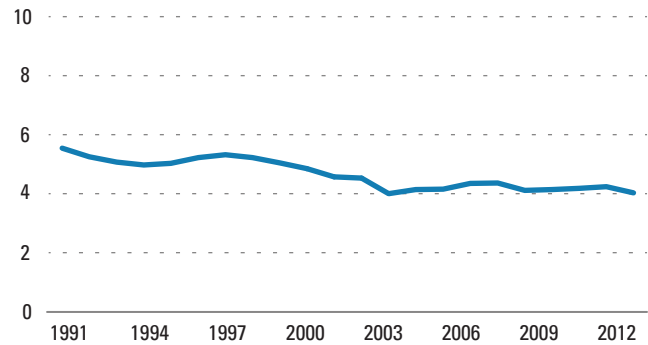
Cost per Passenger Mile



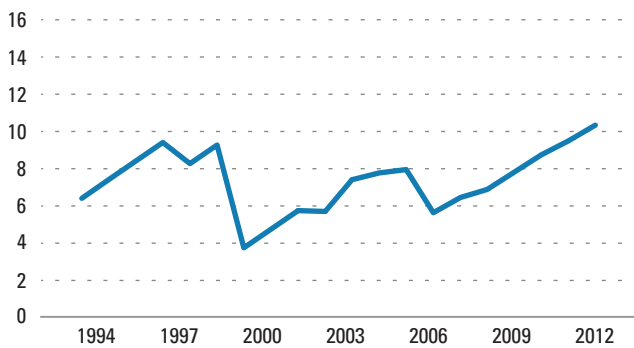
Passengers per Service Hour



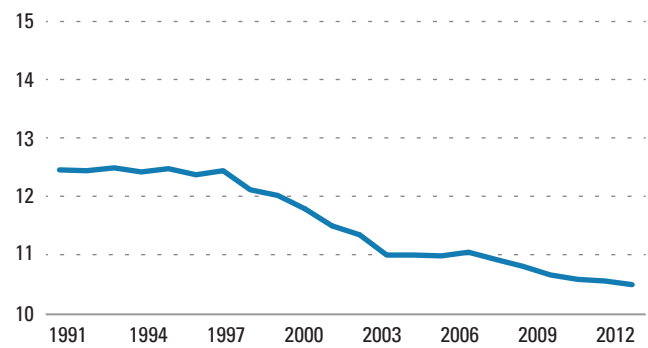
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour

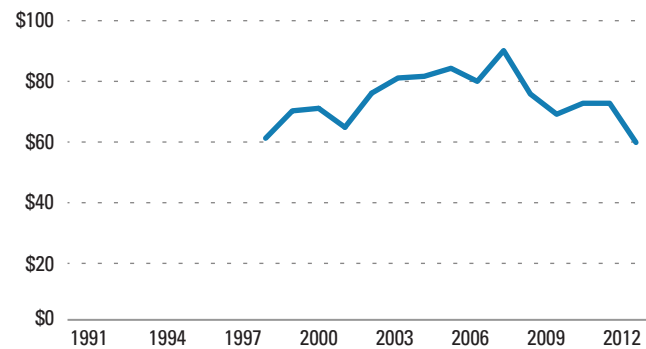


\*Source: NTD 2012

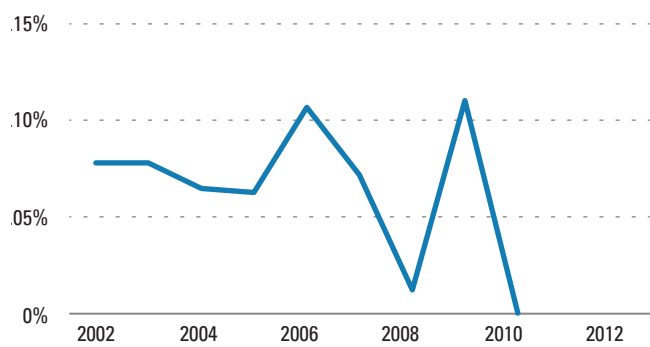
## SANTA MONICA'S BIG BLUE BUS DEMAND RESPONSE

## LOS ANGELES COUNTY

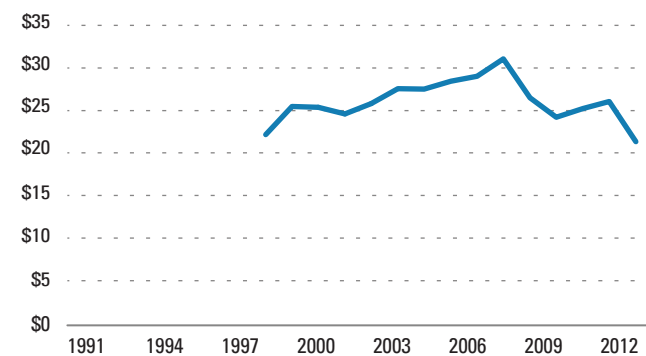
## Cost per Service Hour



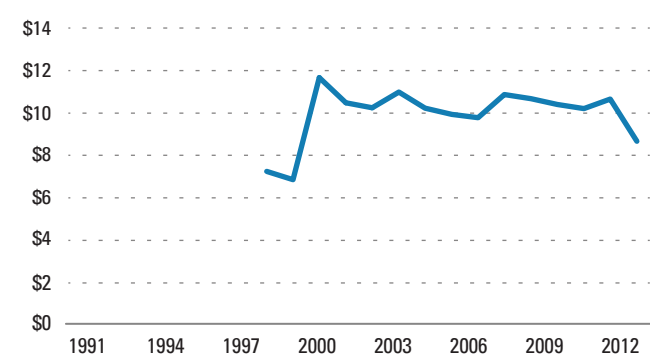
## Farebox Recovery



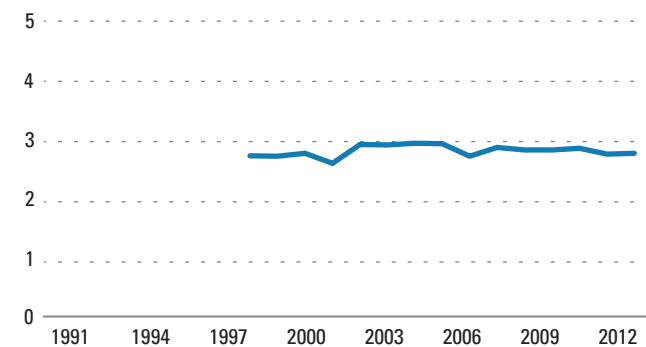
## Cost per Passenger Trip



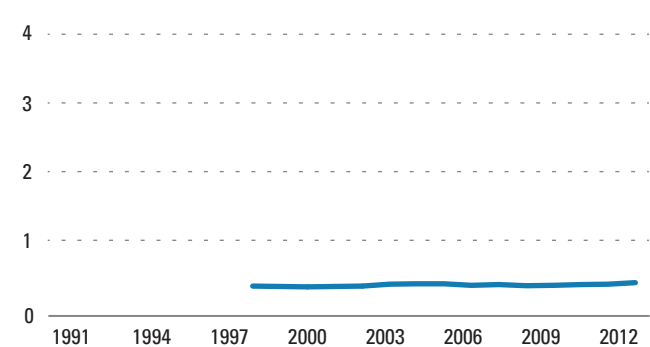
## Cost per Passenger Mile



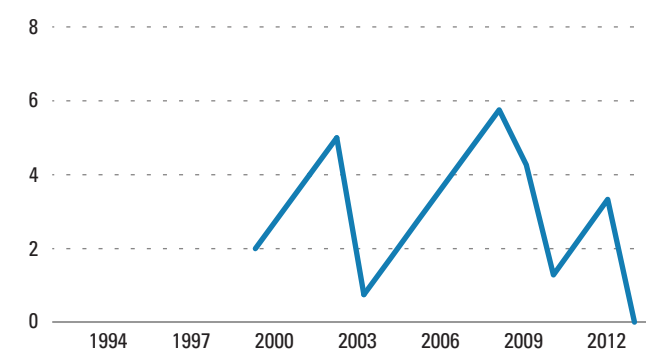
## Passengers per Service Hour



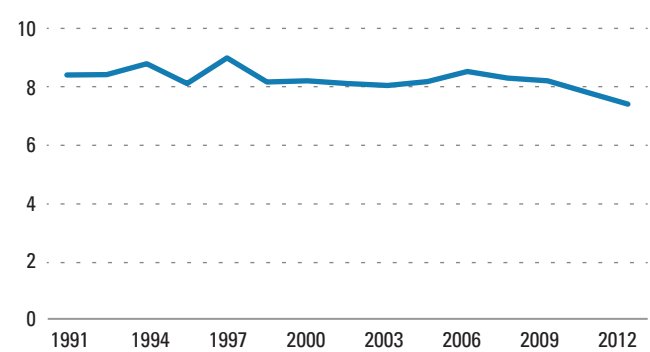
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012



## TORRANCE TRANSIT SYSTEM (TTS)



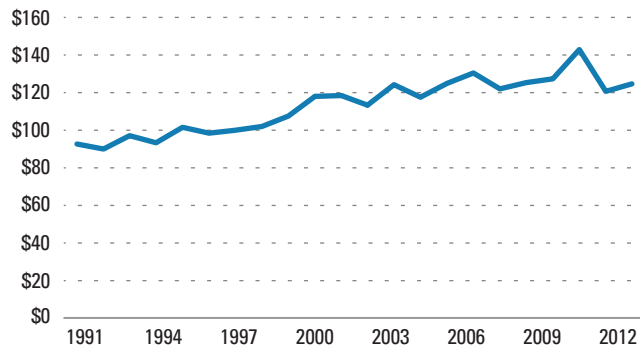
20500 Madrona Avenue  
Torrance, CA 90503  
<http://Transit.TorranceCA.Gov>

<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	\$35
<b>Total Operating Budget</b>	\$ 21,601,407
<b>Capital Expenditures</b>	\$ 12,244,853
<b>Annual Service Provided</b>	181,118 Hours
<b>Service Area</b>	103 Square Miles
<b>Fleet Size</b>	117 Vehicles
<b>Extent of System</b>	337 Directional Route Miles
<b>Span of Service</b>	16 Hours

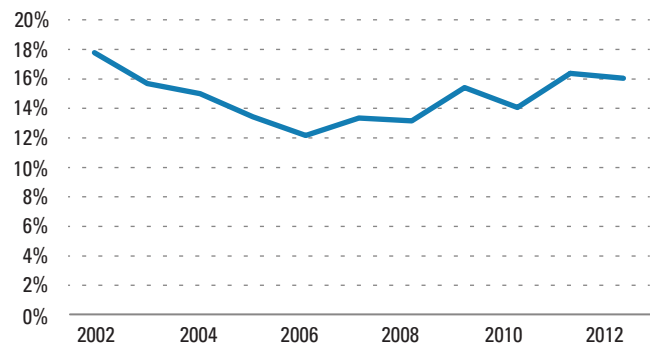
## TORRANCE TRANSIT FIXED ROUTE

## LOS ANGELES COUNTY

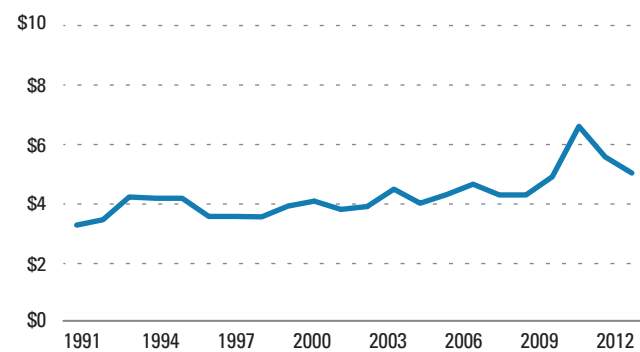
## Cost per Service Hour



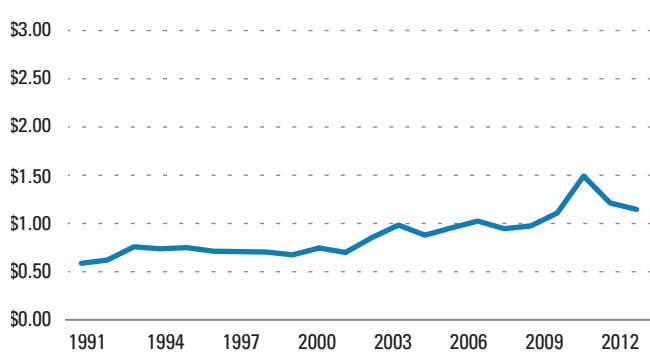
## Farebox Recovery



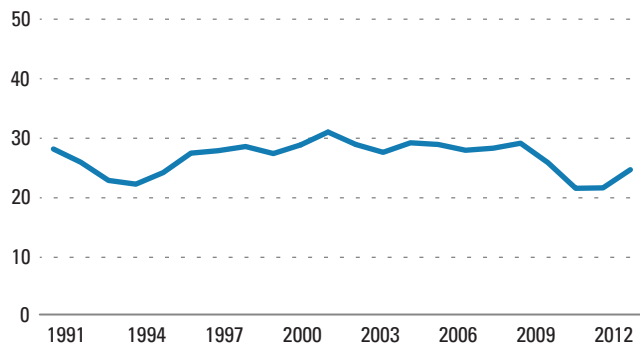
## Cost per Passenger Trip



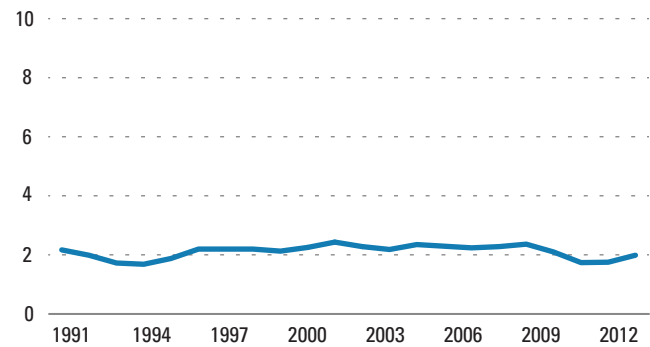
## Cost per Passenger Mile



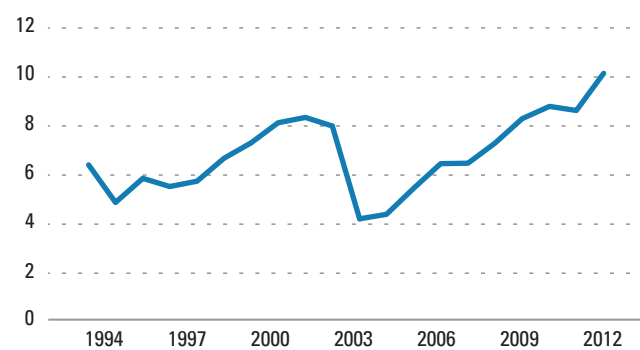
## Passengers per Service Hour



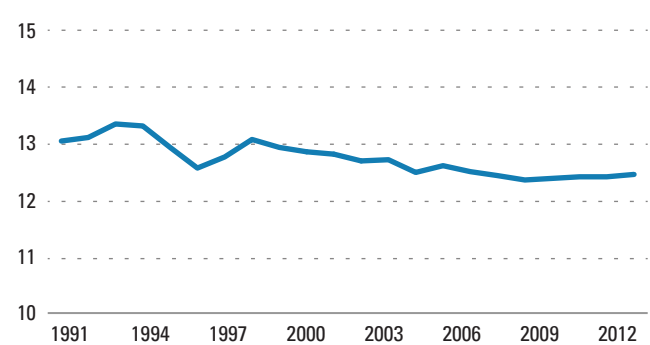
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour

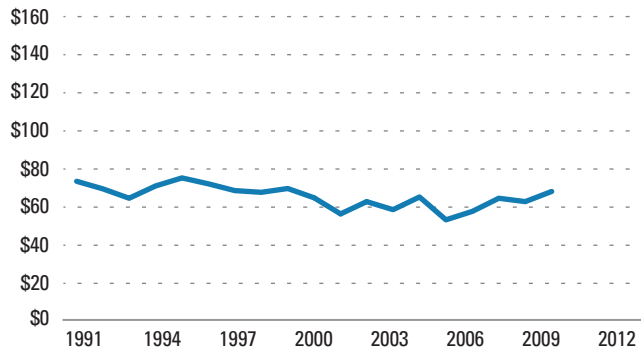


\*Source: NTD 2012

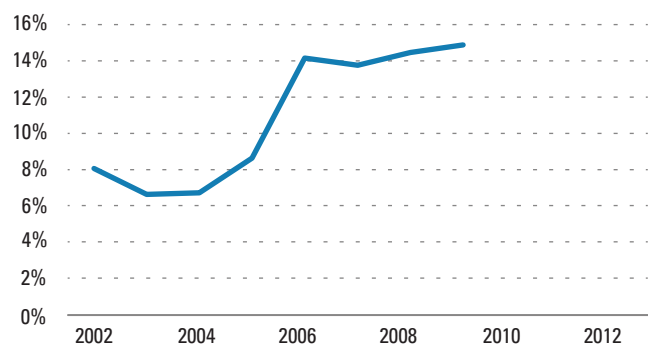
TORRANCE TRANSIT DEMAND RESPONSE

LOS ANGELES COUNTY

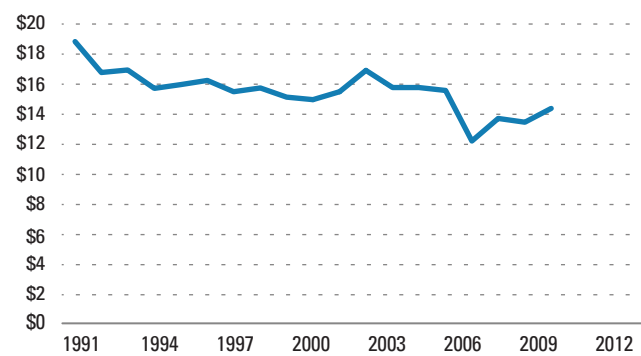
Cost per Service Hour



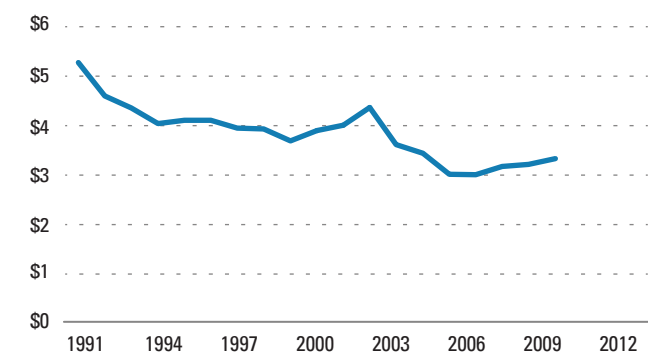
Farebox Recovery



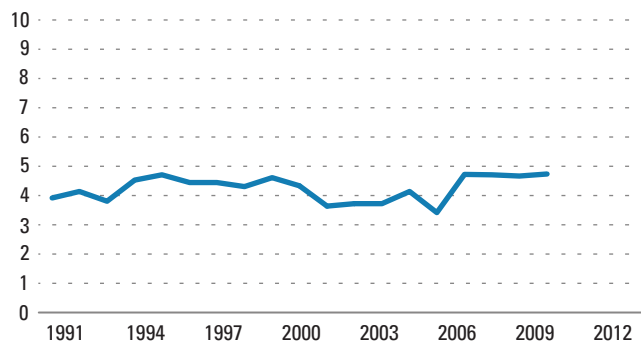
Cost per Passenger Trip



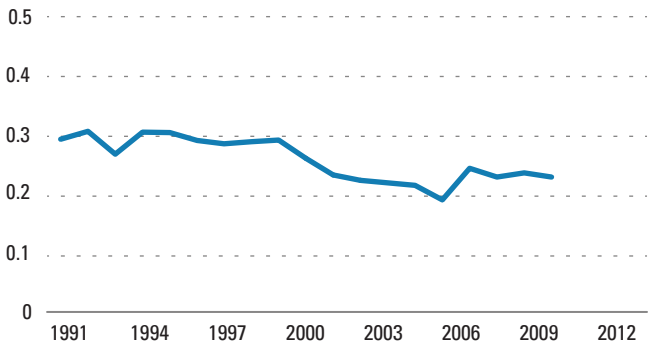
Cost per Passenger Mile



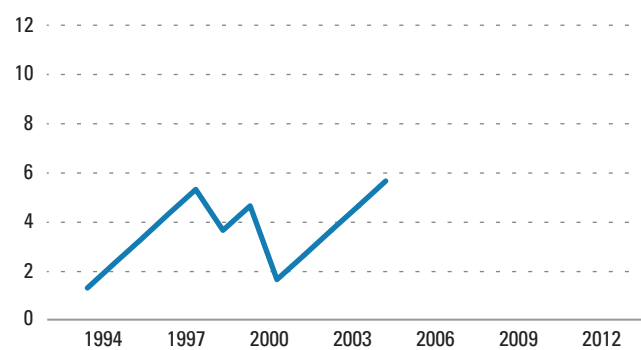
Passengers per Service Hour



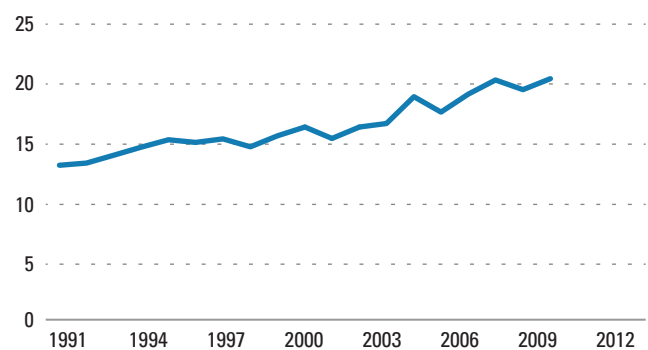
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## ANAHEIM TRANSIT NETWORK



<b>1280 South Anaheim Blvd Anaheim CA 92805 <a href="http://www.rideart.org">http://www.rideart.org</a></b>	
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	N/A
<b>Day Pass</b>	\$5.00
<b>Monthly Pass</b>	N/A
<b>Total Operating Budget</b>	\$11,570,546
<b>Capital Expenditures</b>	\$957,790
<b>Annual Service Provided</b>	209,990 Hours
<b>Service Area</b>	25 Square Miles
<b>Fleet Size</b>	63 Vehicles
<b>Extent of System</b>	95 Directional Route Miles
<b>Span of Service</b>	12 Hours
Please see reporting exceptions list in Appendix C	

## LAGUNA BEACH MUNICIPAL TRANSIT

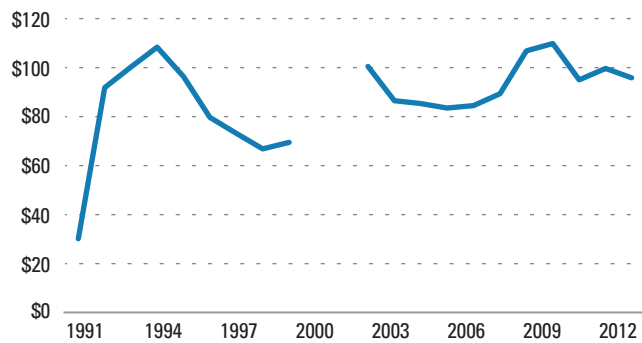
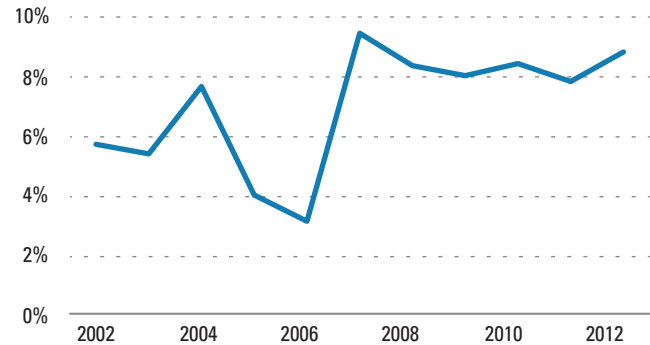
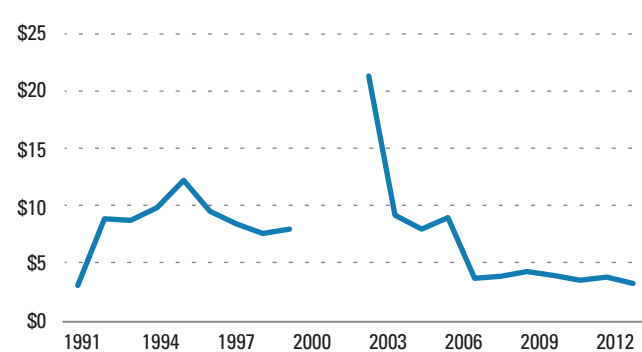
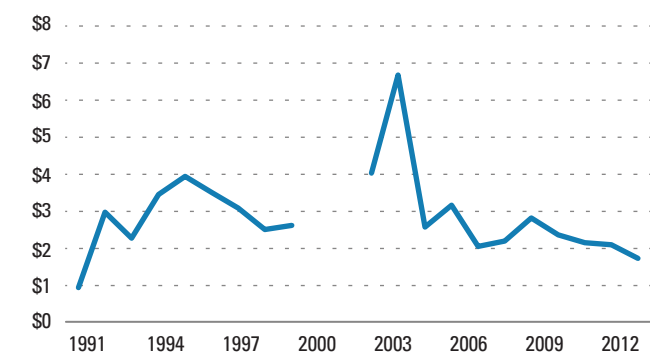
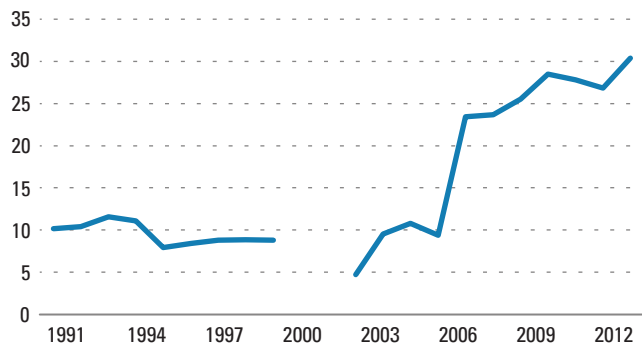
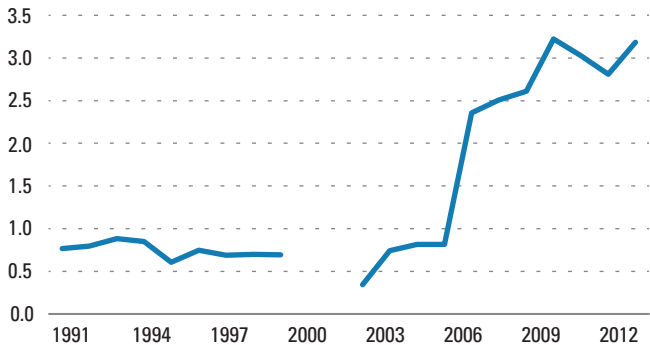
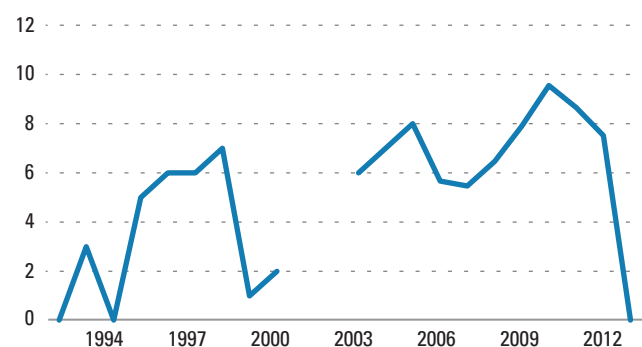
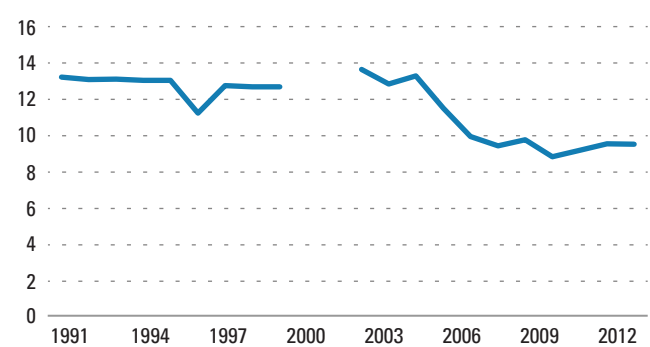


505 Forest Avenue  
Laguna Beach, CA 92651  
<http://www.lagunabeachcity.net/cityhall/pw/transit>

<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$0.75
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	\$30.00
<b>Total Operating Budget</b>	\$2,034,563
<b>Capital Expenditures</b>	\$0
<b>Annual Service Provided</b>	21,246 Hours
<b>Service Area</b>	9 Square Miles
<b>Fleet Size</b>	24 Vehicles
<b>Extent of System</b>	42 Directional Route Miles
<b>Span of Service</b>	12 Hours

## LAGUNA BEACH MUNICIPAL TRANSIT FIXED ROUTE

## ORANGE COUNTY

**Cost per Service Hour****Farebox Recovery****Cost per Passenger Trip****Cost per Passenger Mile****Passengers per Service Hour****Passengers per Service Mile****Fleet Average Vehicle Age****Average Vehicle Speed, in Miles per Hour**

\*Source: NTD 2012

ORANGE COUNTY TRANSPORTATION  
AUTHORITY (OCTA)

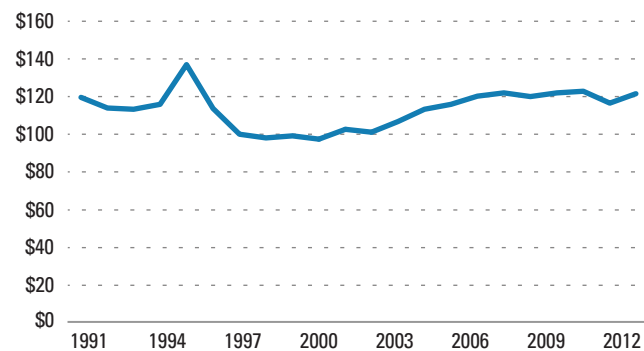
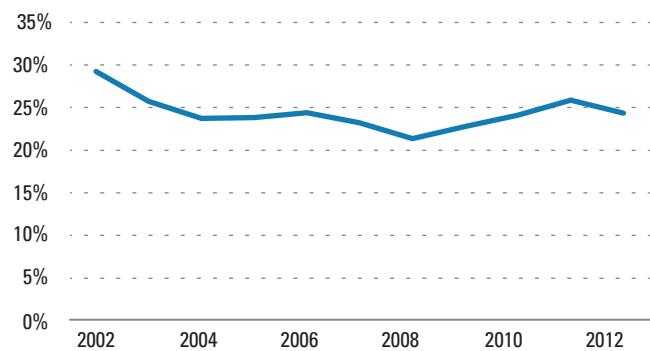
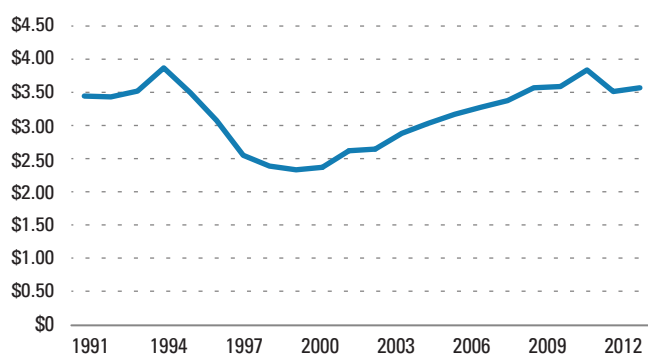
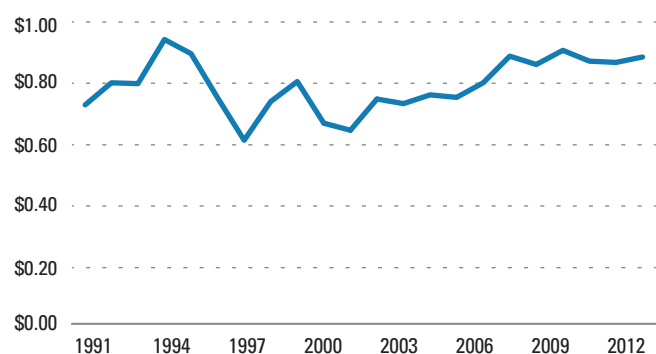
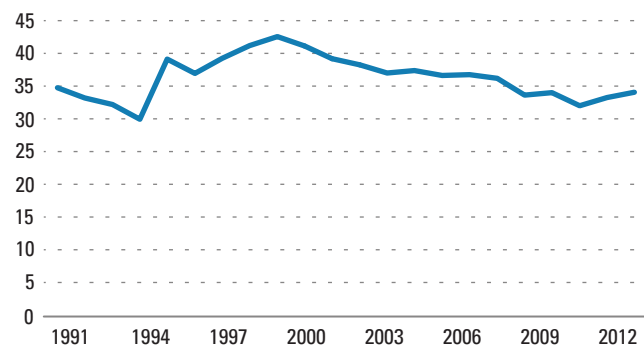
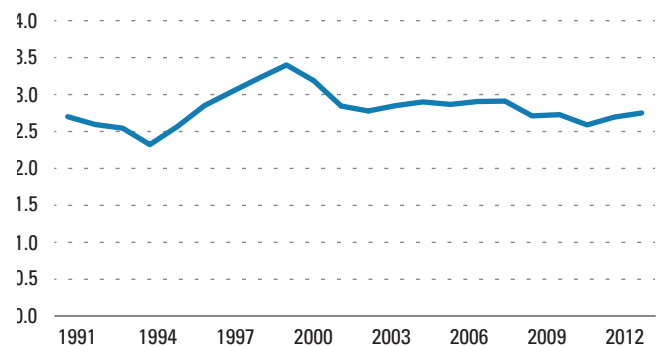
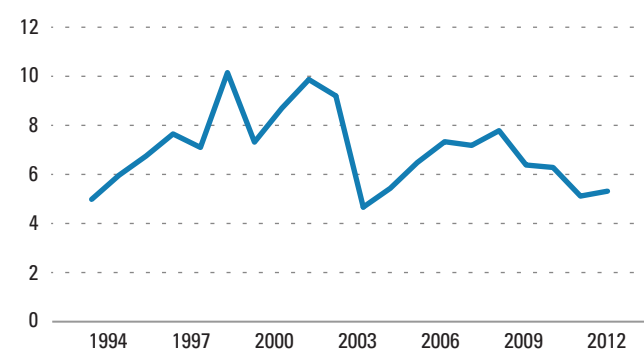
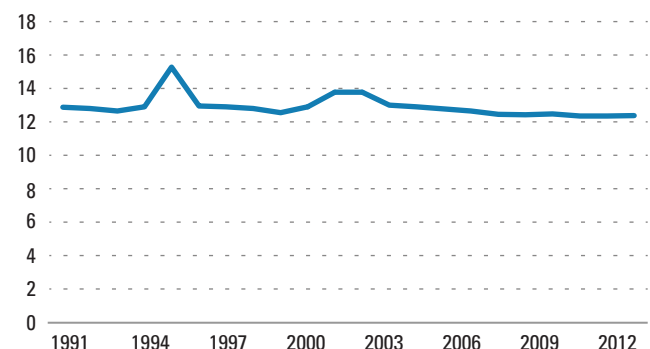


550 S. Main Street  
Orange, CA 92868  
<http://www.octa.net/default.aspx>

<b>Governance Structure</b>	County Transportation Commission and State Designated Transit District
<b>Base Fare</b>	\$1.50
<b>Day Pass</b>	\$4
<b>Monthly Pass</b>	\$55
<b>Total Operating Budget</b>	\$ 251,840,633
<b>Capital Expenditures</b>	\$ 8,284,623
<b>Annual Service Provided</b>	2,399,705 Hours
<b>Service Area</b>	464 Square Miles
<b>Fleet Size</b>	1724 Vehicles
<b>Extent of System</b>	2,356 Directional Route Miles
<b>Span of Service</b>	21 Hours

## ORANGE COUNTY TRANSPORTATION AUTHORITY FIXED ROUTE

## ORANGE COUNTY

**Cost per Service Hour****Farebox Recovery****Cost per Passenger Trip****Cost per Passenger Mile****Passengers per Service Hour****Passengers per Service Mile****Fleet Average Vehicle Age****Average Vehicle Speed, in Miles per Hour**

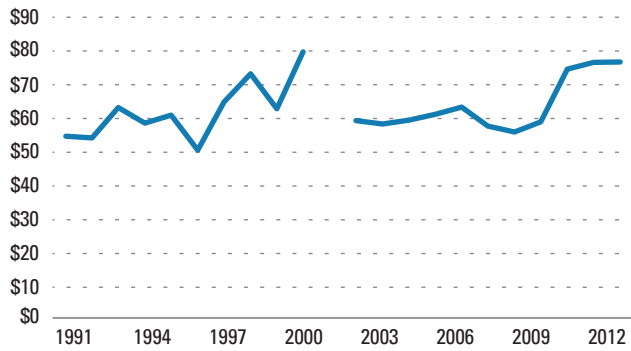
\*Source: NTD 2012



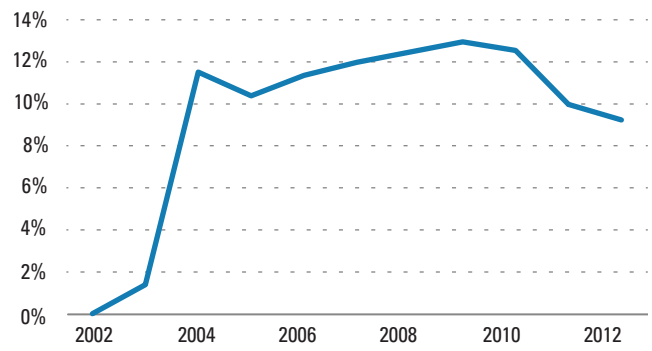
ORANGE COUNTY TRANSPORTATION AUTHORITY DEMAND RESPONSE

ORANGE COUNTY

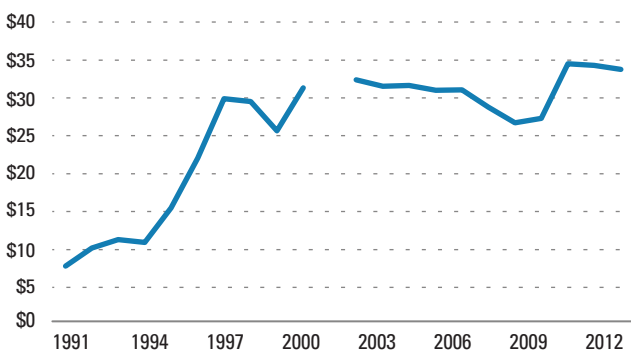
Cost per Service Hour



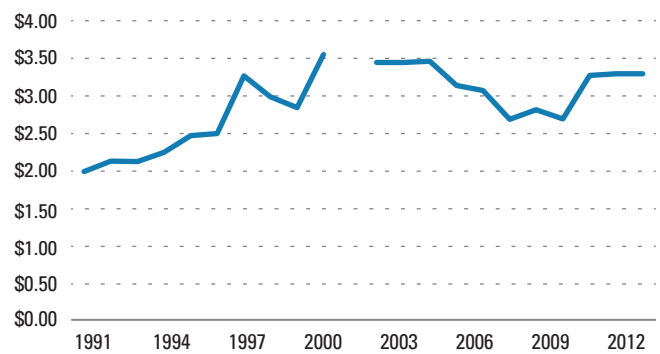
Farebox Recovery



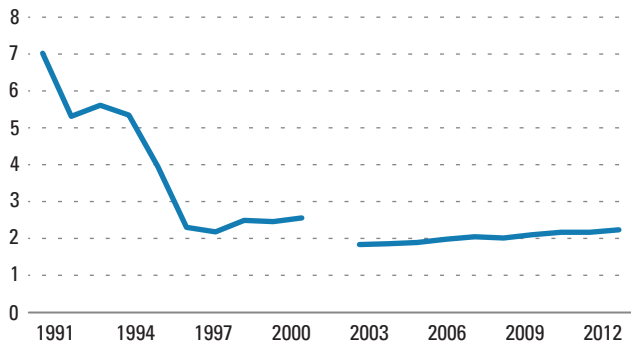
Cost per Passenger Trip



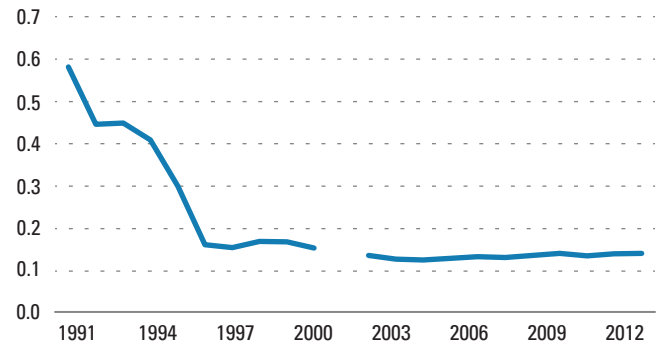
Cost per Passenger Mile



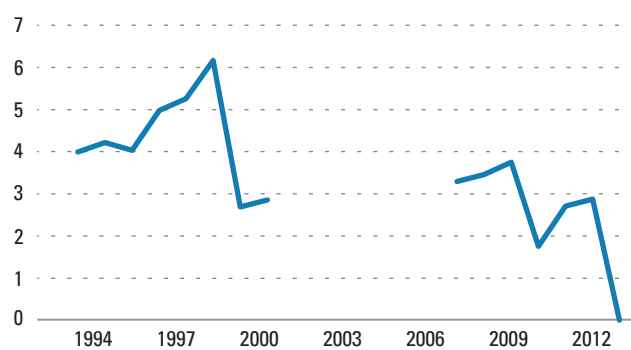
Passengers per Service Hour



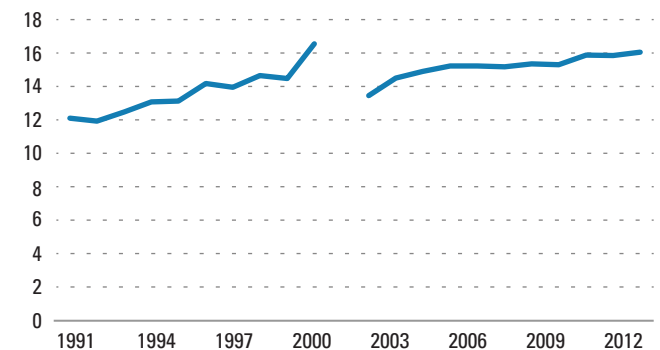
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## CITY OF CORONA

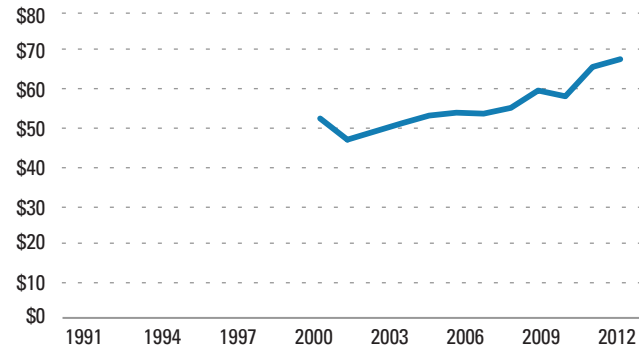


<b>400 South Vicentia Avenue Corona, CA 92882 <a href="http://www.CoronaTransit.com">http://www.CoronaTransit.com</a></b>	
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1.50
<b>Day Pass</b>	\$4.00
<b>Monthly Pass</b>	\$35.00
<b>Total Operating Budget</b>	\$1,926,752
<b>Capital Expenditures</b>	\$42,010
<b>Annual Service Provided</b>	28,748 Hours
<b>Service Area</b>	41 Square Miles
<b>Fleet Size</b>	14 Vehicles
<b>Extent of System</b>	49 Directional Route Miles
<b>Span of Service</b>	11 hours

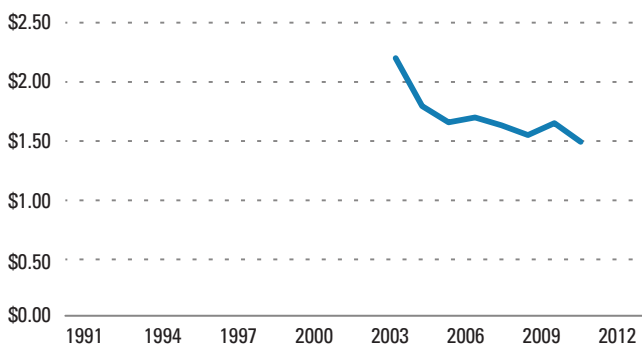
## CITY OF CORONA FIXED ROUTE

## RIVERSIDE COUNTY

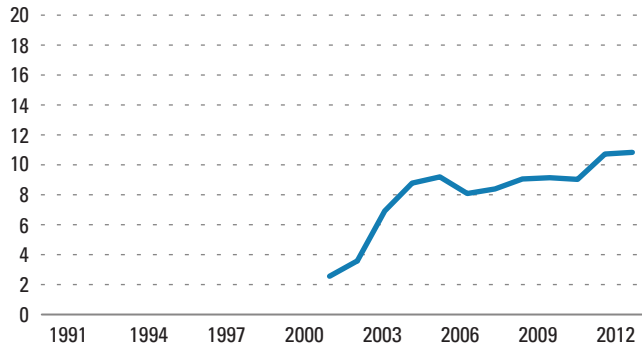
### Cost per Service Hour



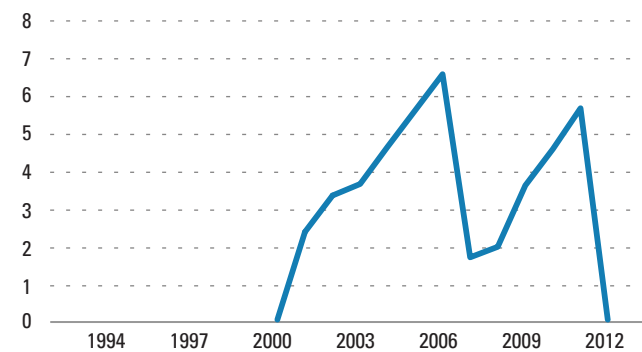
### Cost per Passenger Trip



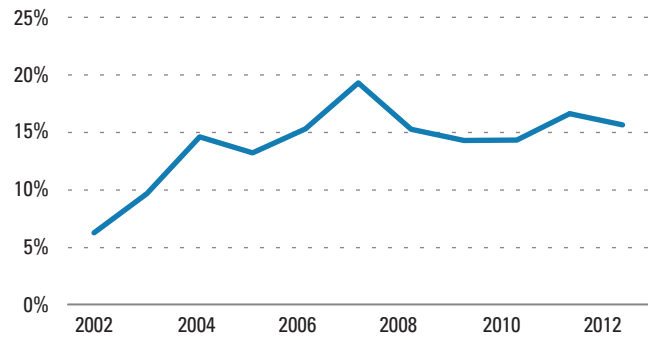
### Passengers per Service Hour



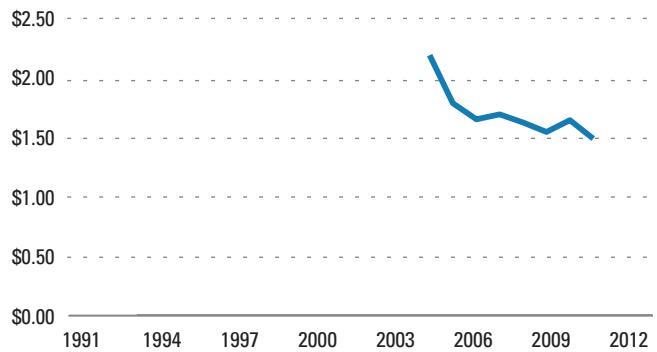
### Fleet Average Vehicle Age



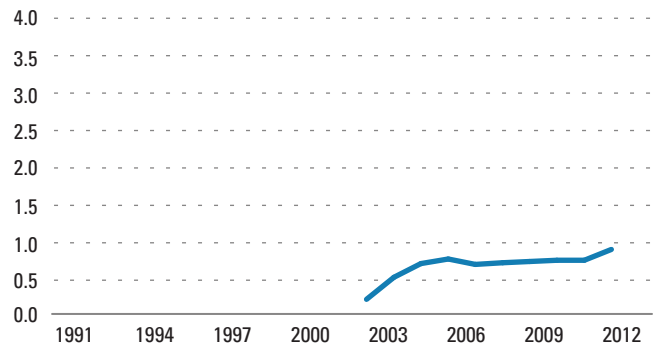
### MB Farebox



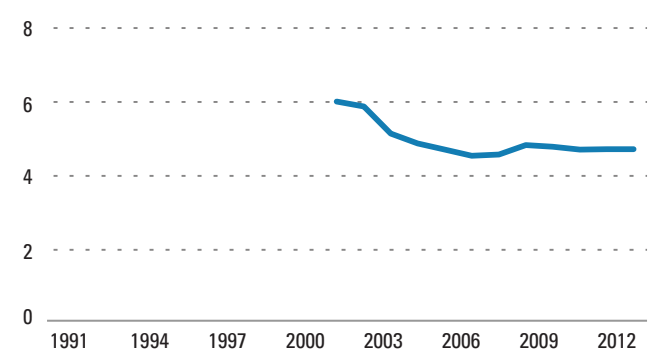
### Cost per Passenger Mile



### Passengers per Service Mile



### Average Vehicle Speed, in Miles per Hour

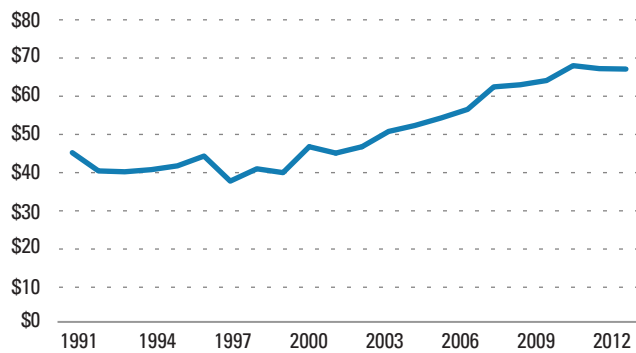


\*Source: NTD 2012

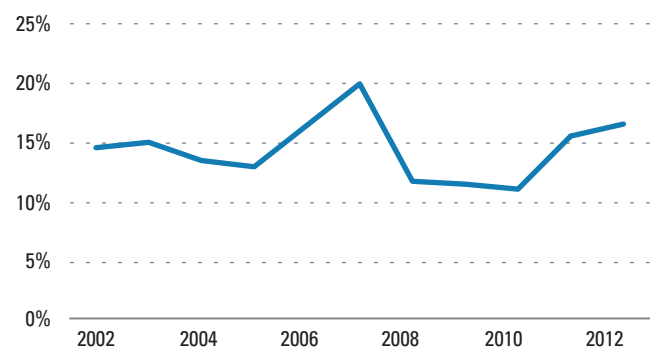
## CITY OF CORONA DEMAND RESPONSE

## RIVERSIDE COUNTY

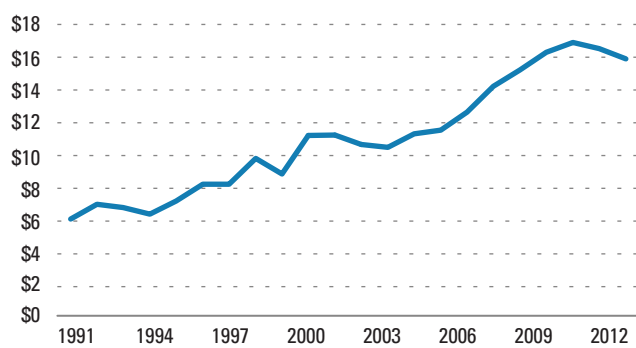
## Cost per Service Hour



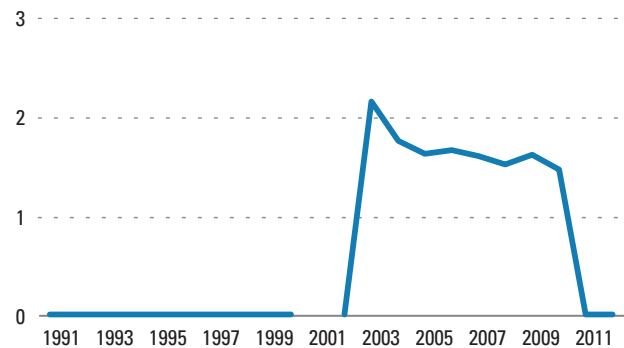
## Farebox Recovery



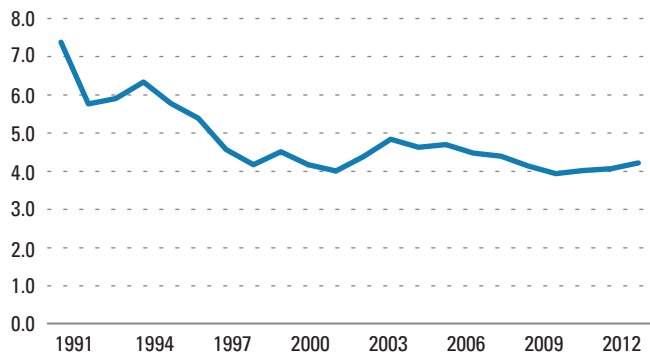
## Cost per Passenger Trip



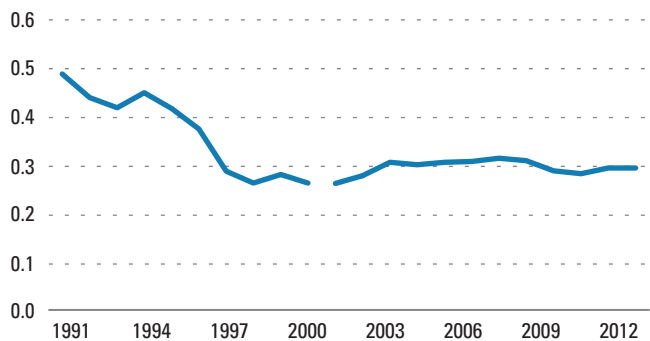
## Cost per Passenger Mile



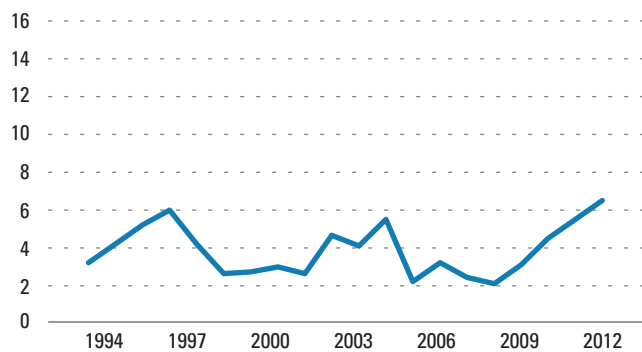
## Passengers per Service Hour



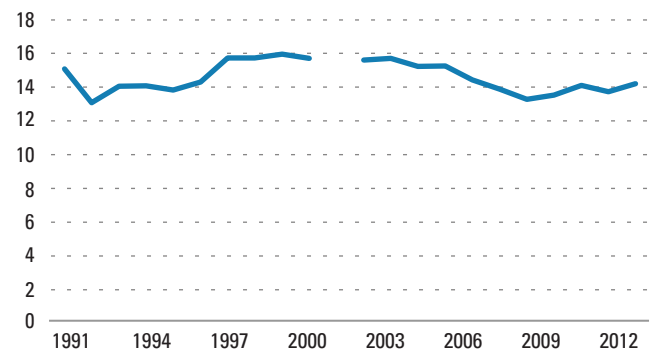
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

CITY OF RIVERSIDE SPECIAL TRANSPORTATION  
(CITY OF RIVERSIDE)

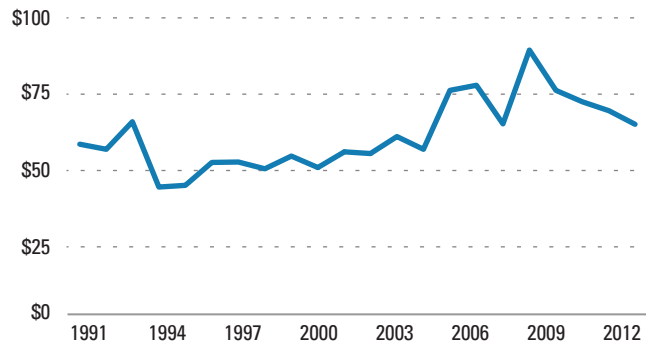
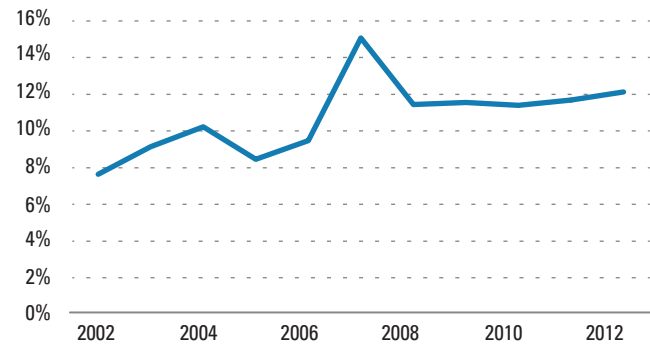
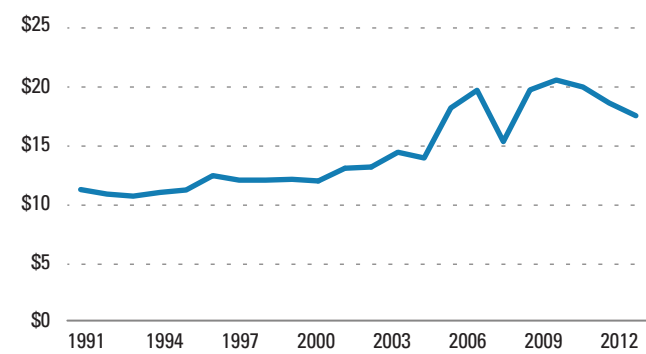
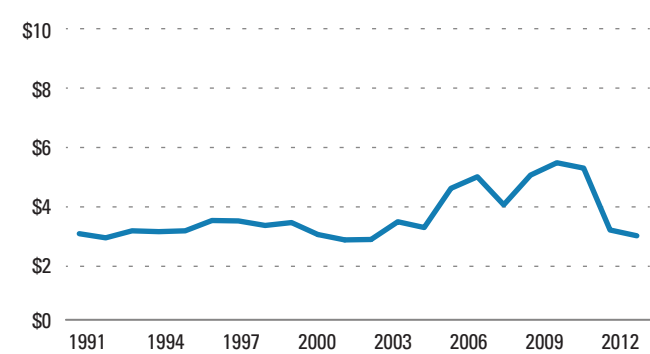
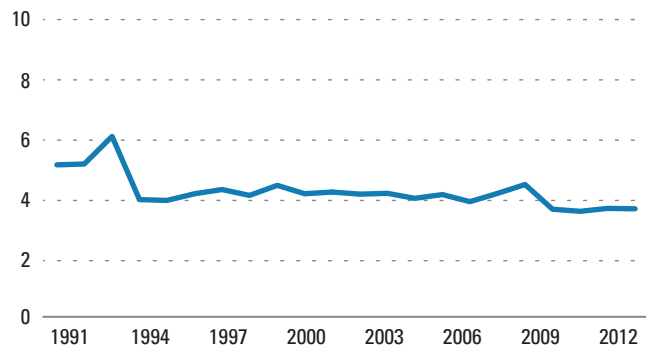
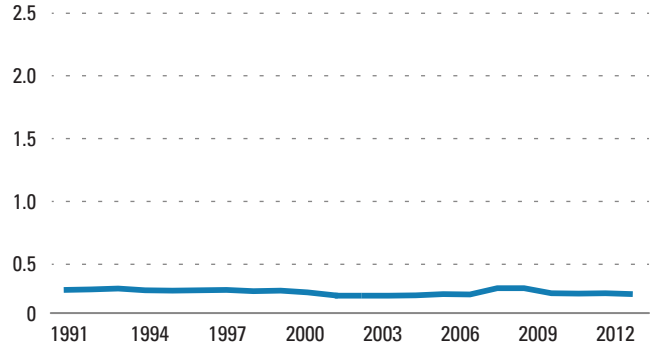
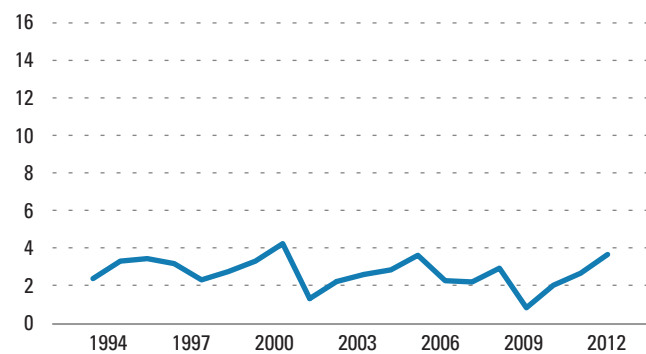
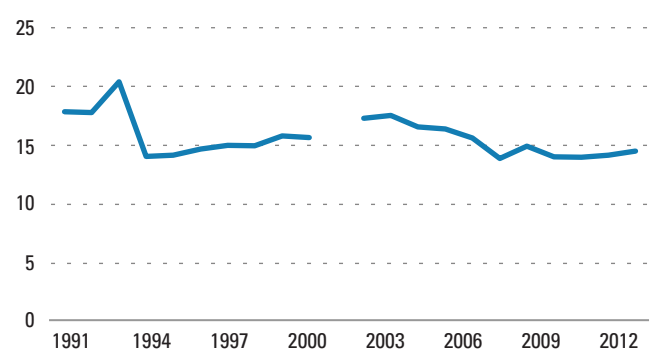


3900 Main Street  
Riverside, CA 92522-0144  
[http://www.riversideca.gov/park\\_rec/seniors-transportation.asp](http://www.riversideca.gov/park_rec/seniors-transportation.asp)

<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$2.00
<b>Day Pass</b>	n/a
<b>Monthly Pass</b>	n/a
<b>Total Operating Budget</b>	\$3,055,927
<b>Capital Expenditures</b>	\$1,121,209
<b>Annual Service Provided</b>	46,898 Hours
<b>Service Area</b>	87 Square Miles
<b>Fleet Size</b>	31 Vehicles
<b>Extent of System</b>	n/a
<b>Span of Service</b>	9 hours

## CITY OF RIVERSIDE SPECIAL TRANSPORTATION FIXED ROUTE

## RIVERSIDE COUNTY

**Cost per Service Hour****Farebox Recovery****Cost per Passenger Trip****Cost per Passenger Mile****Passengers per Service Hour****Passengers per Service Mile****Fleet Average Vehicle Age****Average Vehicle Speed, in Miles per Hour**

\*Source: NTD 2012

## RIVERSIDE TRANSIT AGENCY (RTA)



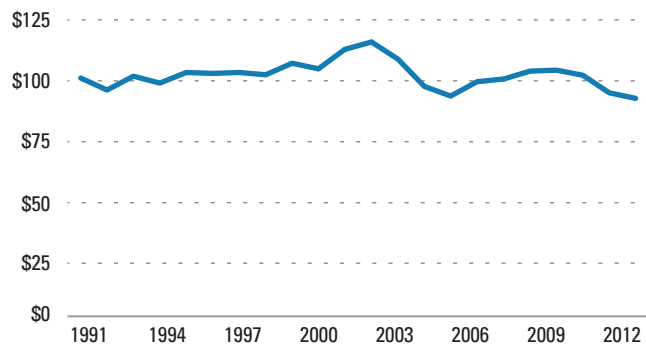
1825 Third Street, P.O. Box 59968  
 Riverside, CA 92507  
<http://www.riversidetransit.com>

<b>Governance Structure</b>	Joint Powers Authority
<b>Base Fare</b>	\$1.50
<b>Day Pass</b>	\$4.00
<b>Monthly Pass</b>	\$50.00
<b>Total Operating Budget</b>	\$48,264,842
<b>Capital Expenditures</b>	\$5,534,379
<b>Annual Service Provided</b>	630,493 Hours
<b>Service Area</b>	2725 Square Miles
<b>Fleet Size</b>	270 Vehicles
<b>Extent of System</b>	1,678 Directional Route Miles
<b>Span of Service</b>	18 hours

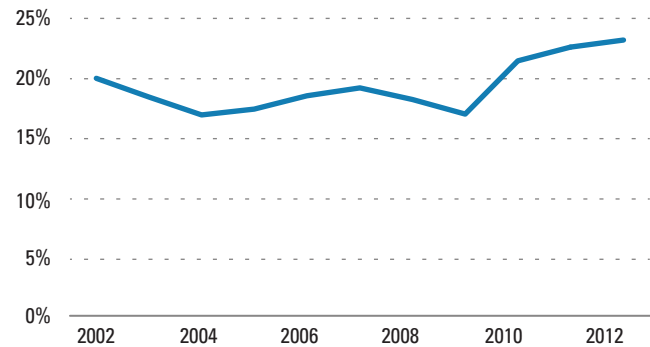
## RTA FIXED ROUTE

## RIVERSIDE COUNTY

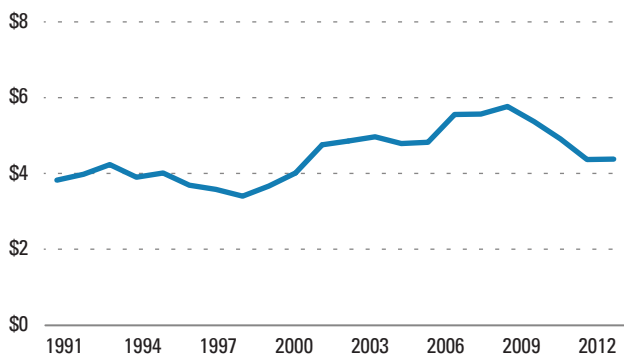
## Cost per Service Hour



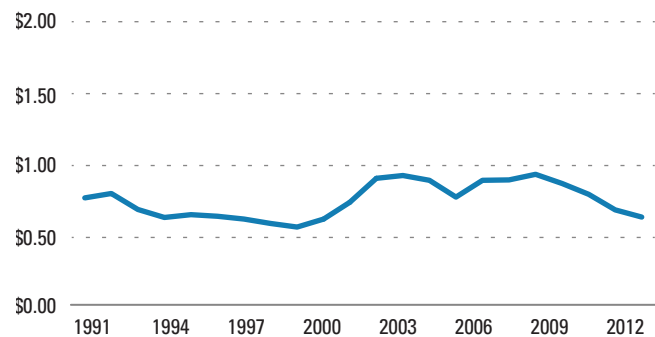
## Farebox Recovery



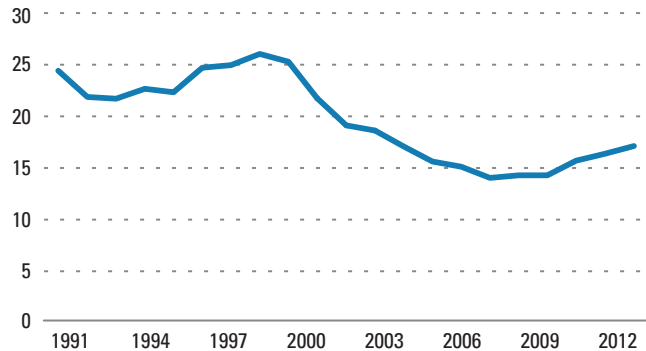
## Cost per Passenger Trip



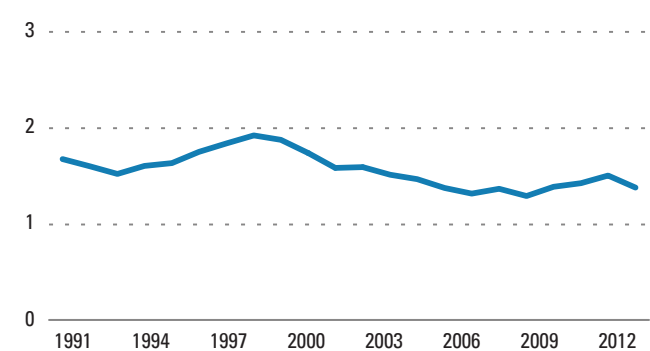
## Cost per Passenger Mile



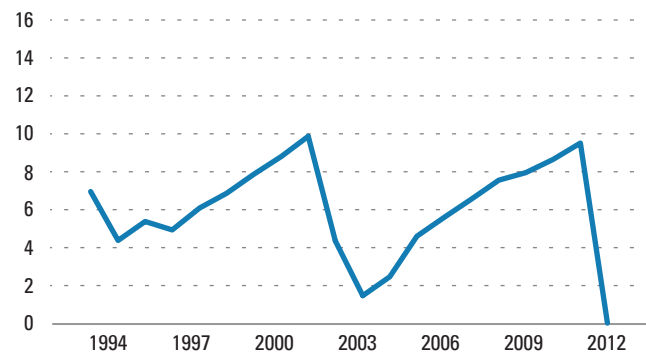
## Passengers per Service Hour



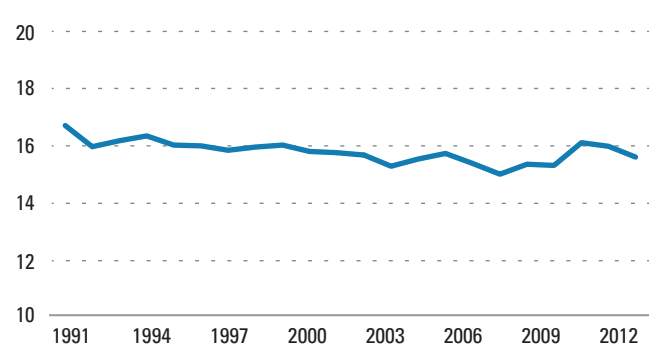
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



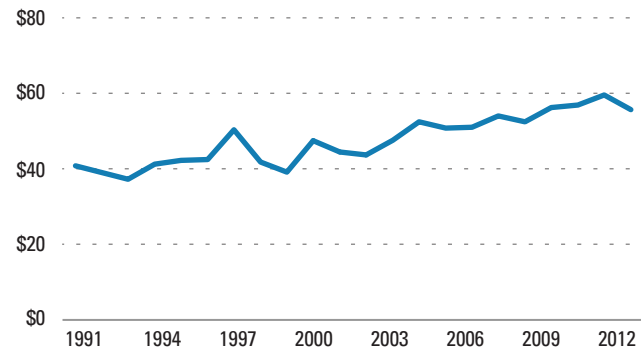
\*Source: NTD 2012



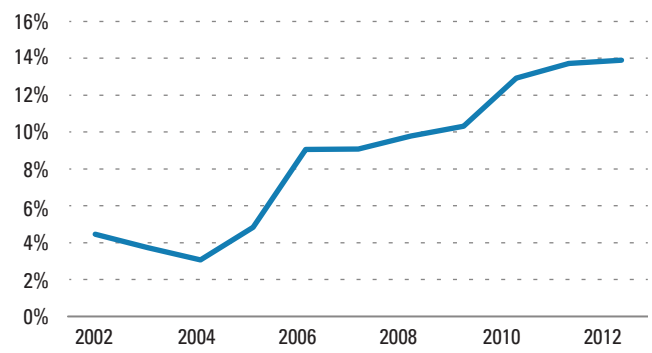
RTA DEMAND RESPONSE

RIVERSIDE COUNTY

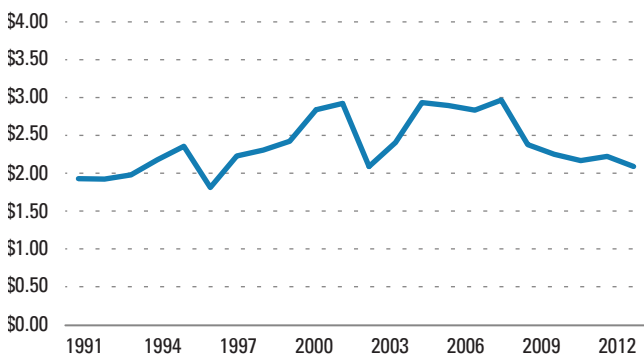
Cost per Service Hour



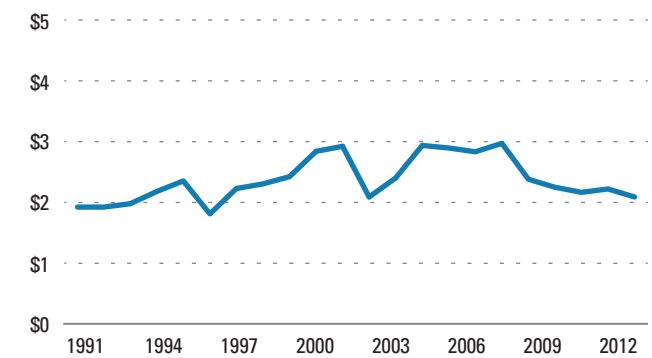
Farebox Recovery



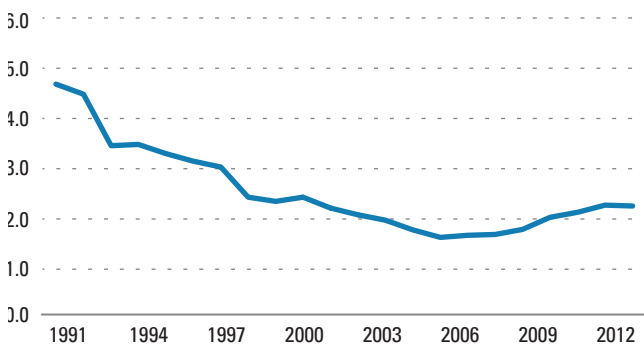
Cost per Passenger Trip



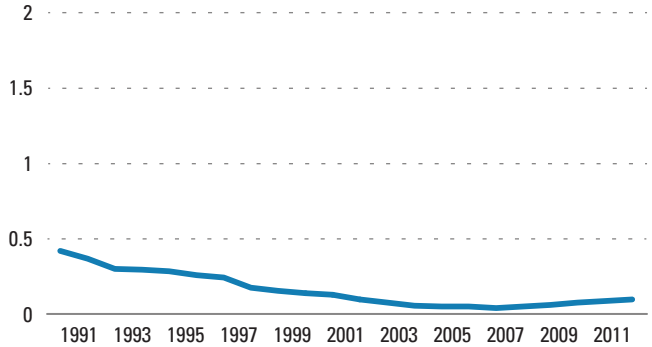
Cost per Passenger Mile



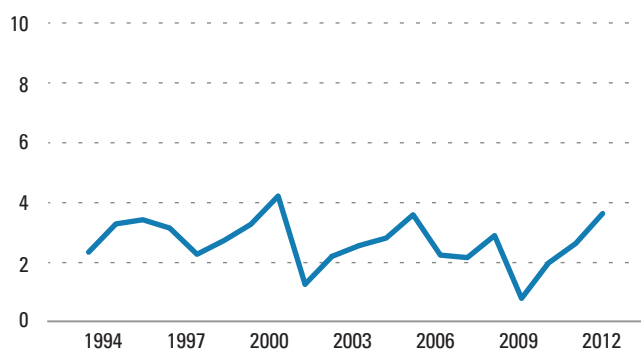
Passengers per Service Hour



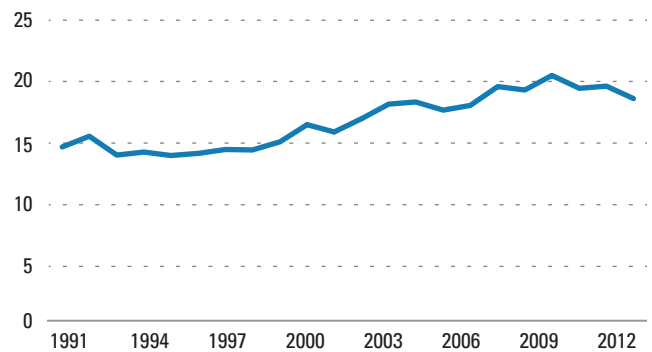
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

SUNLINE TRANSIT AGENCY  
(SUNLINE)

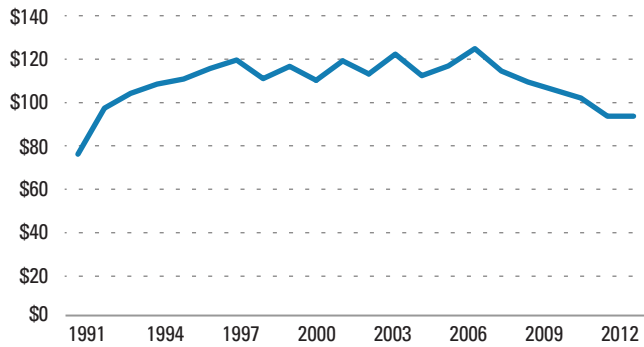


32-505 Harry Oliver Trail Thousand Palms, CA 92276-0398 <a href="http://www.sunline.org">http://www.sunline.org</a>	
<b>Governance Structure</b>	Joint Powers Authority
<b>Base Fare</b>	\$1.00
<b>Day Pass</b>	\$3.00
<b>Monthly Pass</b>	\$34.00
<b>Total Operating Budget</b>	\$21,788,954
<b>Capital Expenditures</b>	\$4,603,421
<b>Annual Service Provided</b>	246,513 Hours
<b>Service Area</b>	1120 Square Miles
<b>Fleet Size</b>	100 Vehicles
<b>Extent of System</b>	291 Directional Route Miles
<b>Span of Service</b>	14 hours

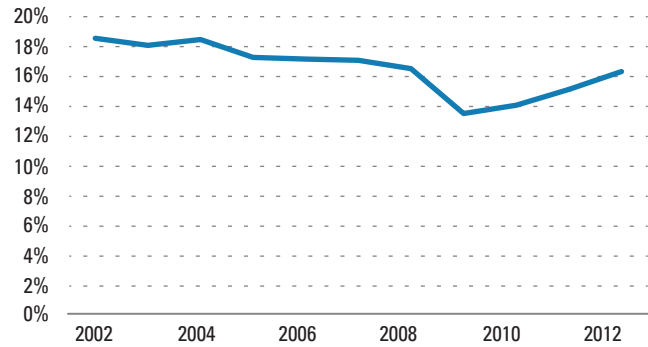
SUNLINE FIXED ROUTE

RIVERSIDE COUNTY

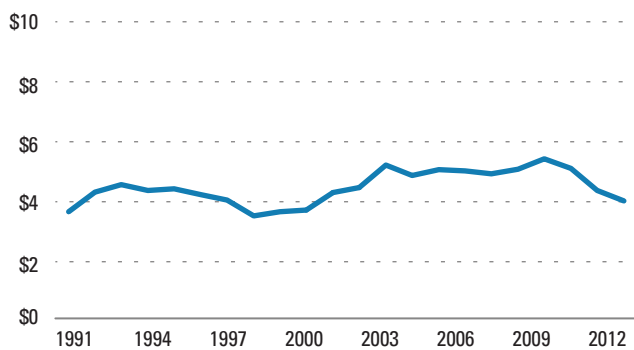
Cost per Service Hour



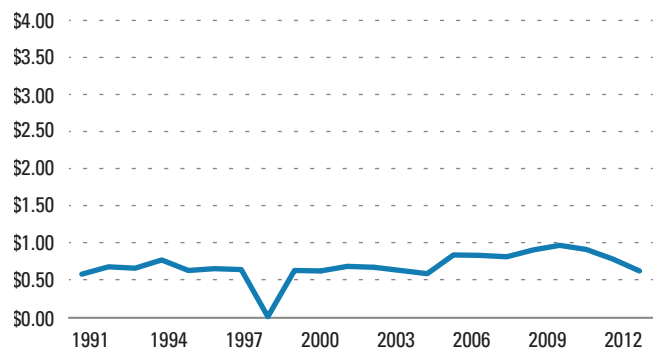
Farebox Recovery



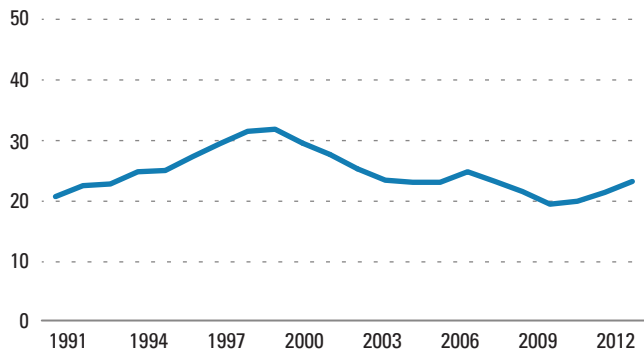
Cost per Passenger Trip



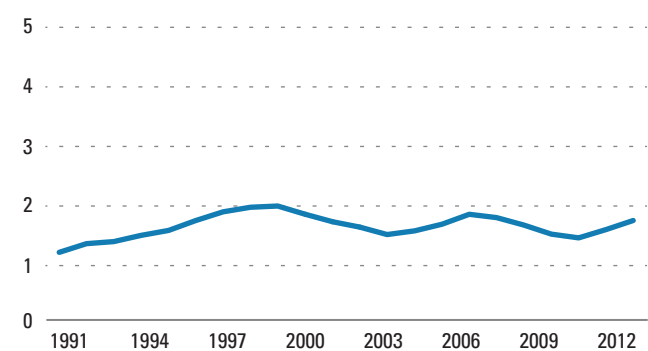
Cost per Passenger Mile



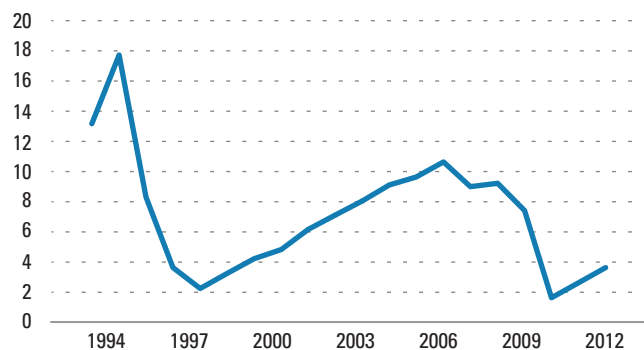
Passengers per Service Hour



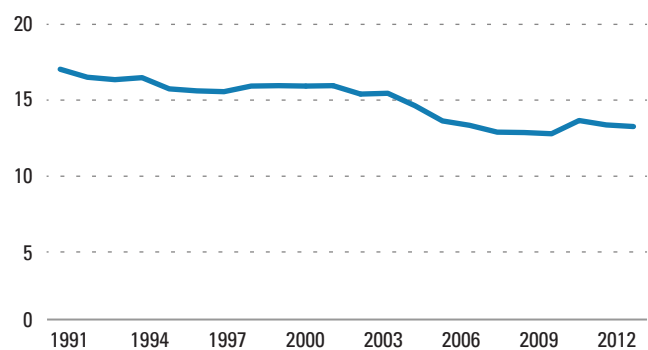
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour

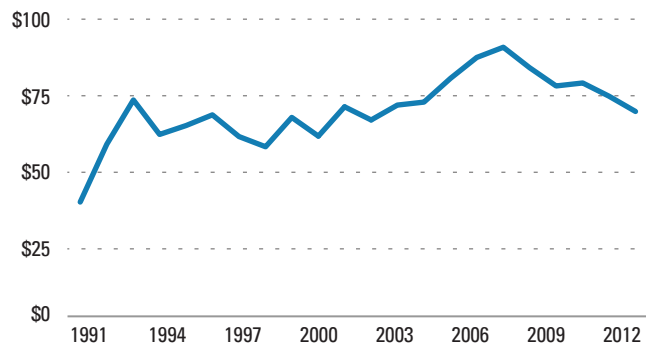


\*Source: NTD 2012

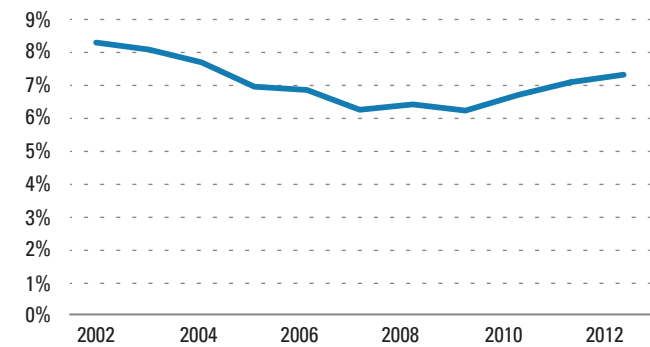
## SUNLINE DEMAND RESPONSE

## RIVERSIDE COUNTY

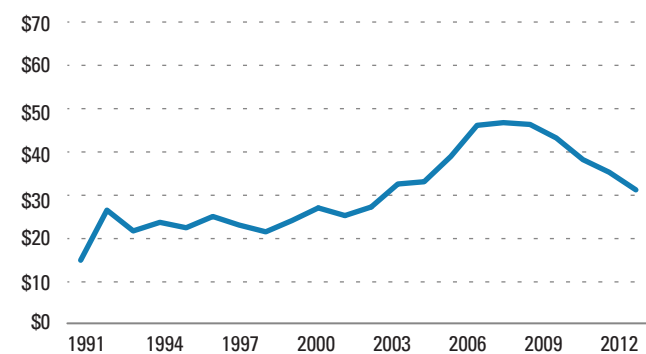
## Cost per Service Hour



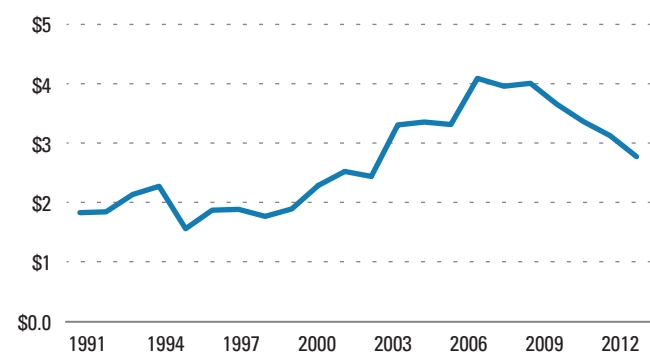
## Farebox Recovery



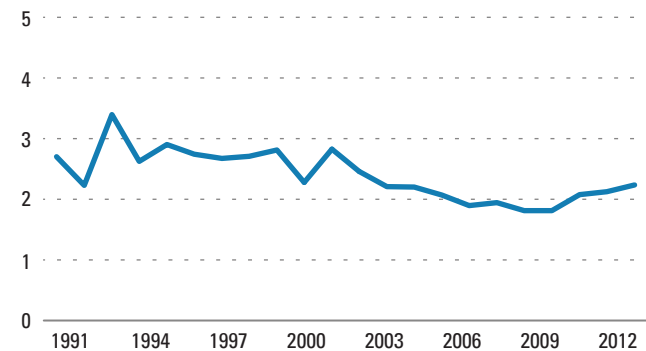
## Cost per Passenger Trip



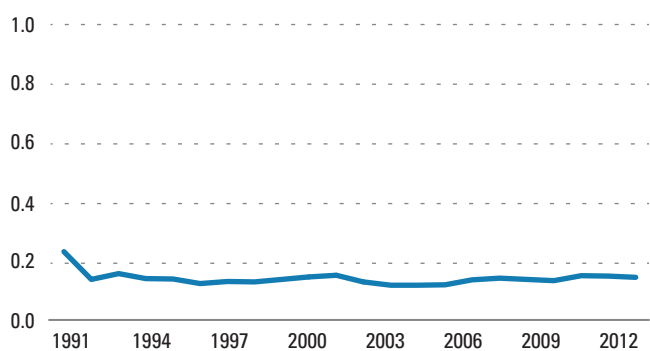
## Cost per Passenger Mile



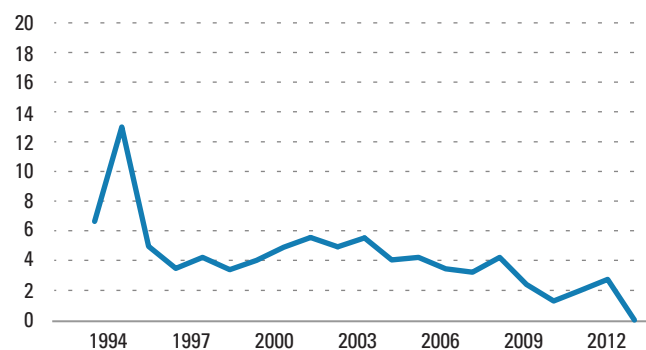
## Passengers per Service Hour



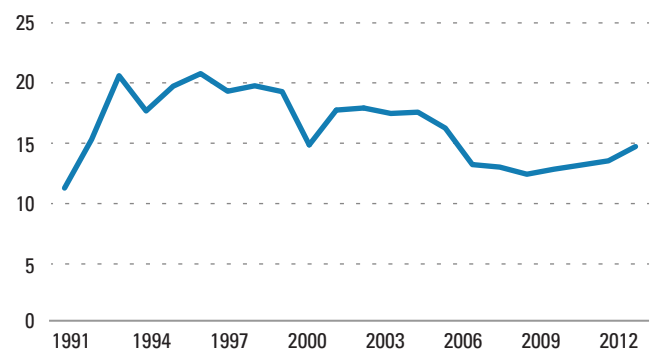
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## OMNITRANS



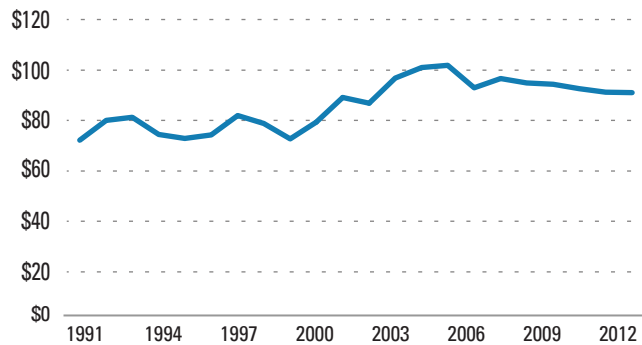
1700 W. Fifth Street  
 San Bernardino, CA 92411  
<http://www.omnitrans.org>

<b>Governance Structure</b>	Joint Powers Authority
<b>Base Fare</b>	\$1.5
<b>Day Pass</b>	\$4
<b>Monthly Pass</b>	\$47
<b>Total Operating Budget</b>	\$ 69,227,853
<b>Capital Expenditures</b>	\$ 33,367,174
<b>Annual Service Provided</b>	796,025 Hours
<b>Service Area</b>	463 Square Miles
<b>Fleet Size</b>	283 Vehicles
<b>Extent of System</b>	853 Directional Route Miles
<b>Span of Service</b>	20 Hours

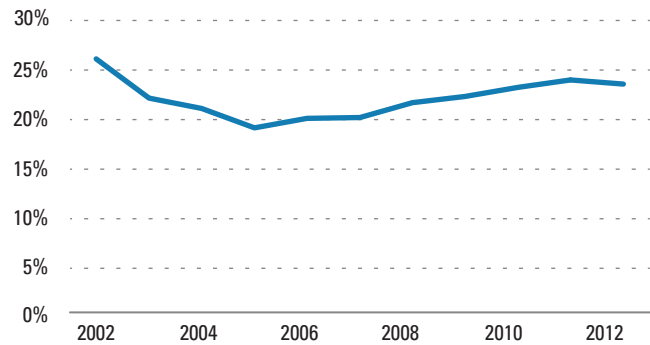
## OMNITRANS FIXED ROUTE

## SAN BERNARDINO COUNTY

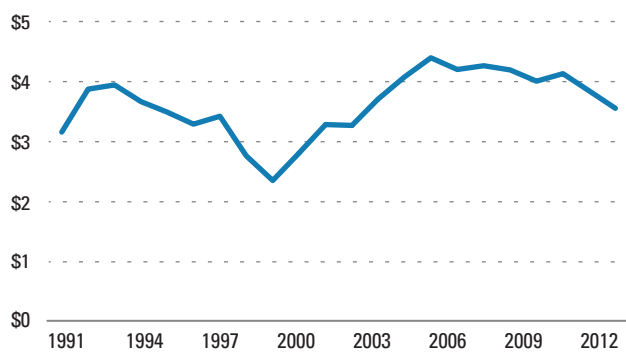
## Cost per Service Hour



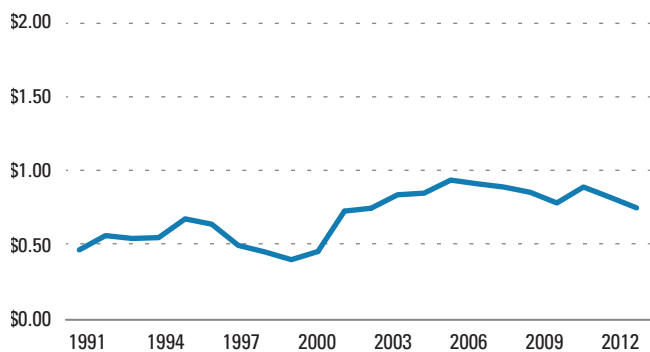
## Farebox Recovery



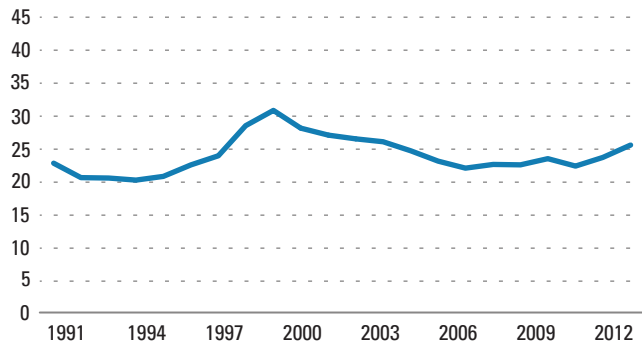
## Cost per Passenger Trip



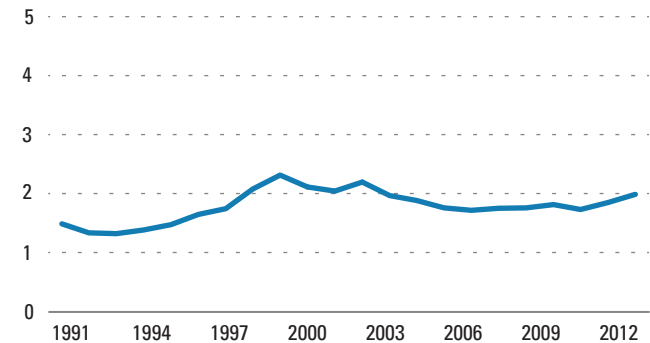
## Cost per Passenger Mile



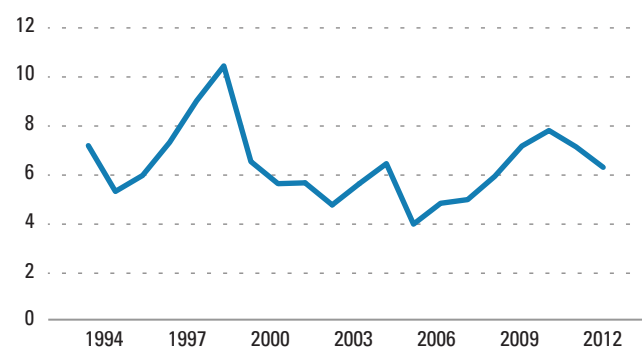
## Passengers per Service Hour



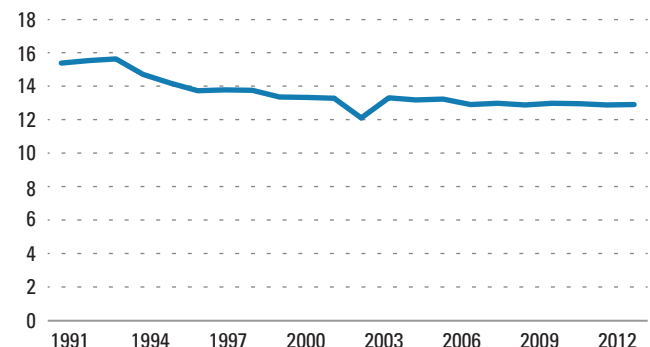
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour

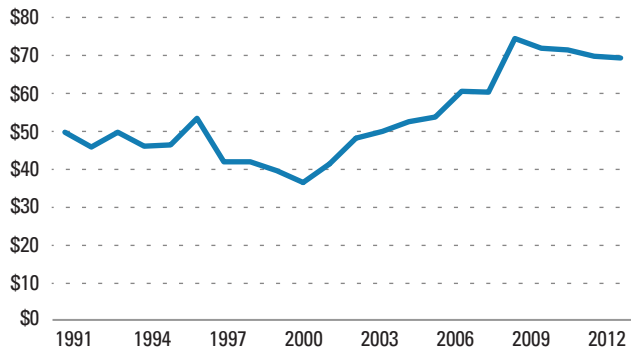


\*Source: NTD 2012

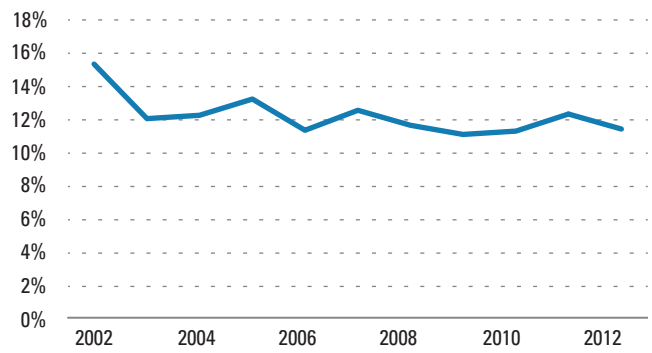
OMNITRANS DEMAND RESPONSE

SAN BERNARDINO COUNTY

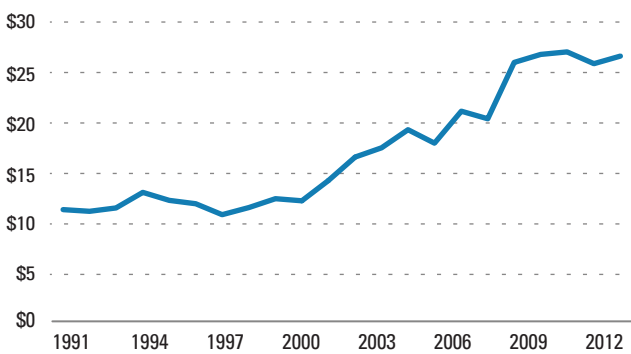
Cost per Service Hour



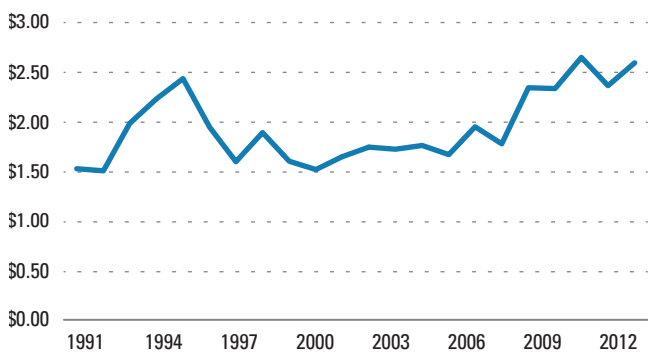
Farebox Recovery



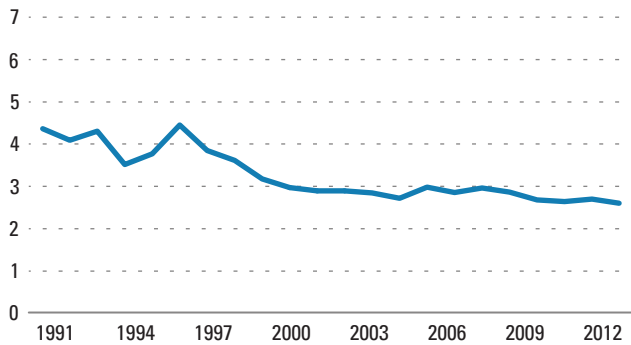
Cost per Passenger Trip



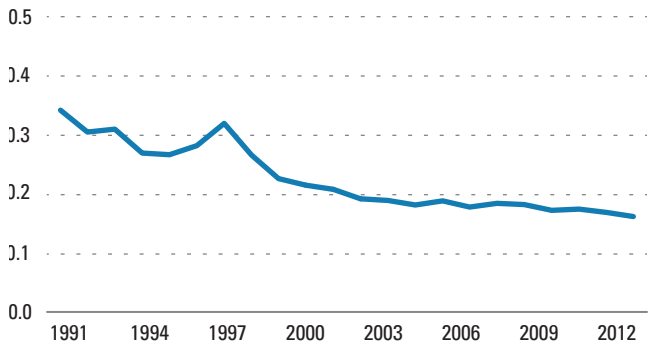
Cost per Passenger Mile



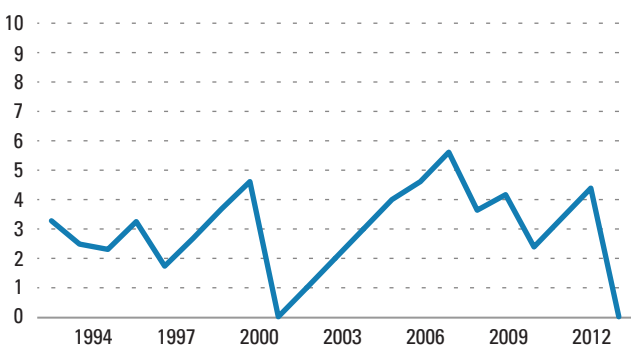
Passengers per Service Hour



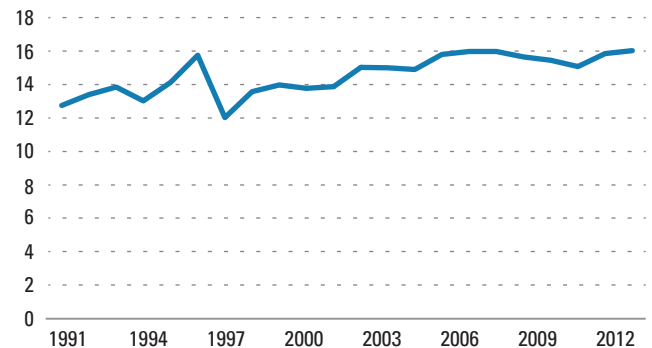
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## VICTOR VALLEY TRANSIT AUTHORITY



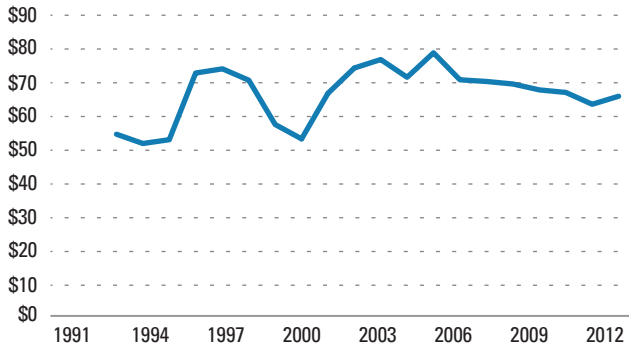
<b>17150 Smoketree Street Hesperia, CA 92345 <a href="http://vvta.org/index.htm">http://vvta.org/index.htm</a></b>	
<b>Governance Structure</b>	Joint Powers Authority
<b>Base Fare</b>	\$1.25
<b>Day Pass</b>	\$3.50
<b>Monthly Pass</b>	\$50
<b>Total Operating Budget</b>	\$ 10,295,100
<b>Capital Expenditures</b>	\$ 7,834,591
<b>Annual Service Provided</b>	147,866 Hours
<b>Service Area</b>	424 Square Miles
<b>Fleet Size</b>	91 Vehicles
<b>Extent of System</b>	659 Directional Route Miles
<b>Span of Service</b>	14.5 Hours



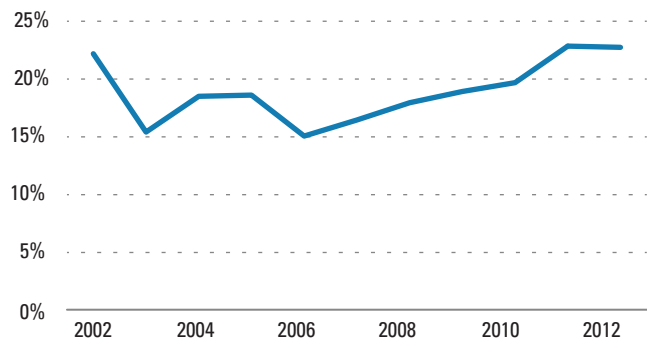
VICTOR VALLEY TRANSIT AUTHORITY FIXED ROUTE

SAN BERNARDINO COUNTY

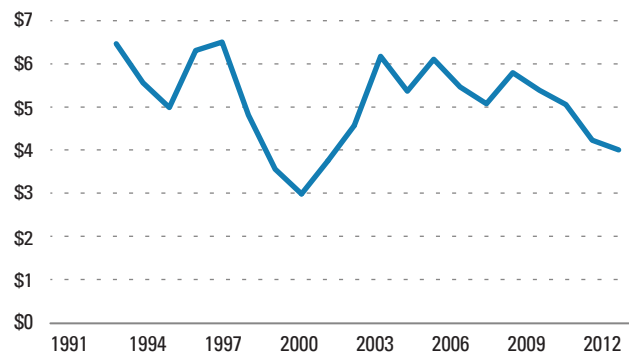
Cost per Service Hour



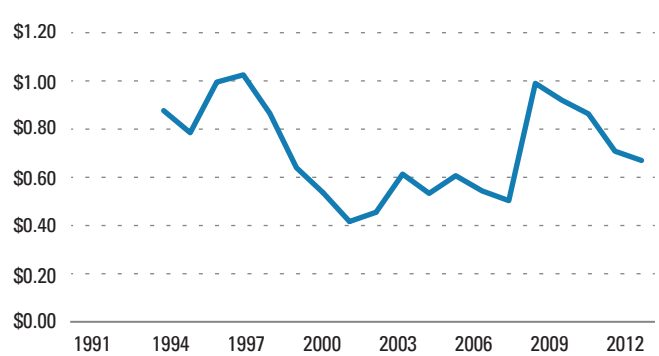
Farebox Recovery



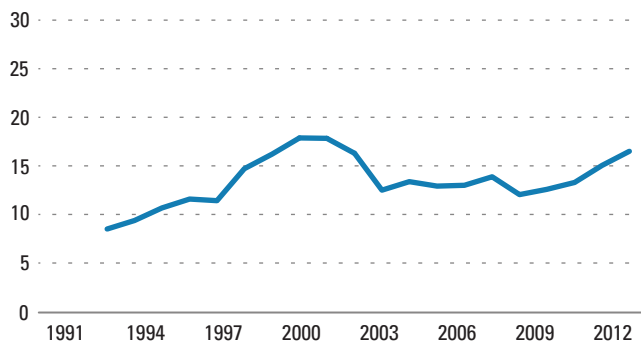
Cost per Passenger Trip



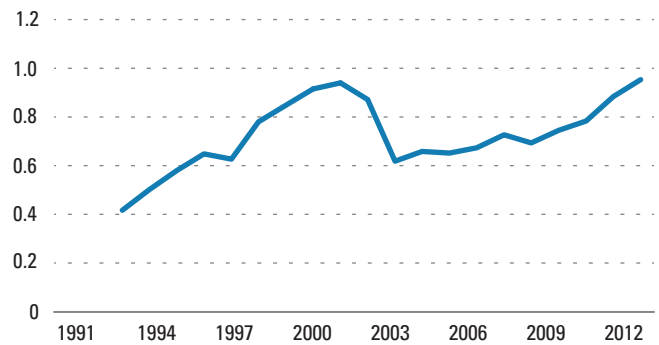
Cost per Passenger Mile



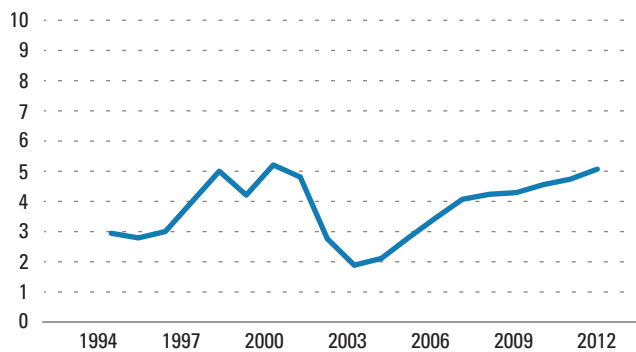
Passengers per Service Hour



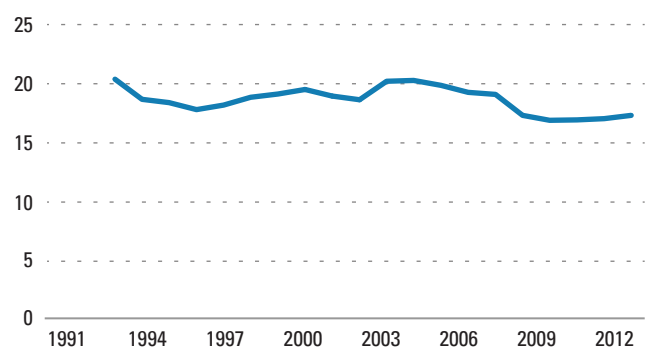
Passengers per Service Mile



Fleet Average Vehicle Age



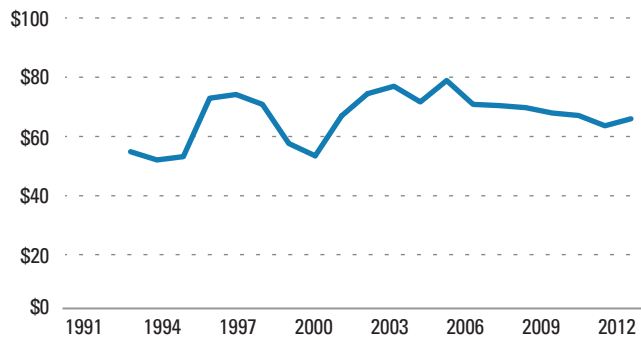
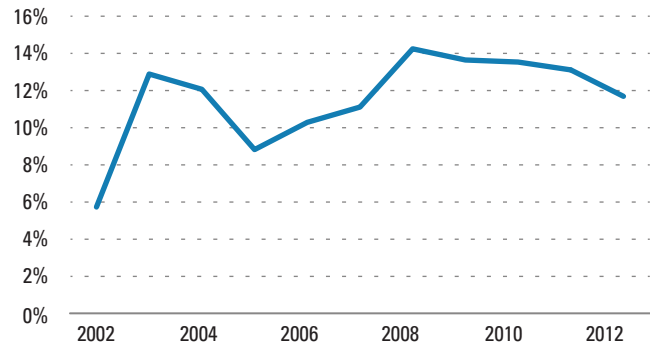
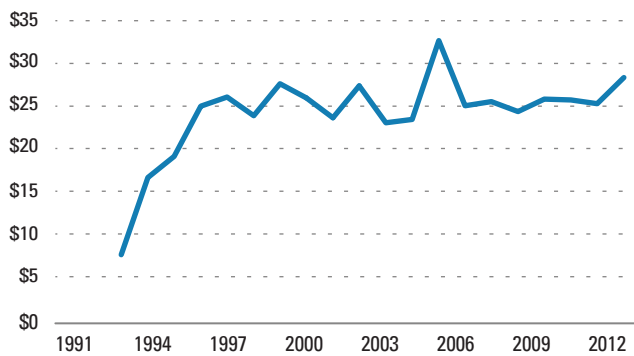
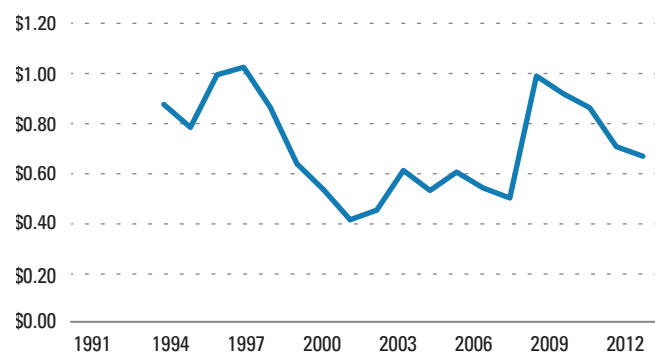
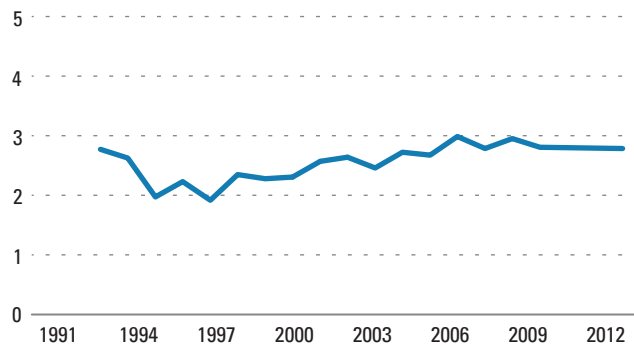
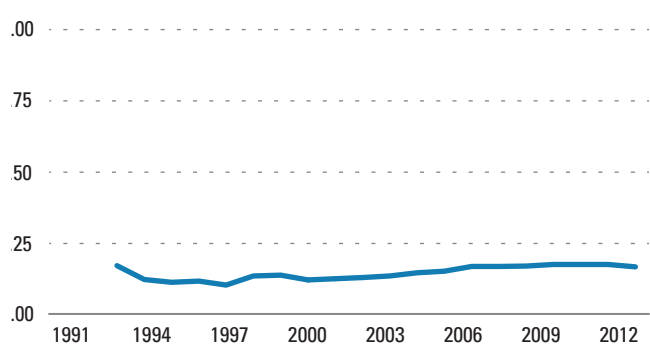
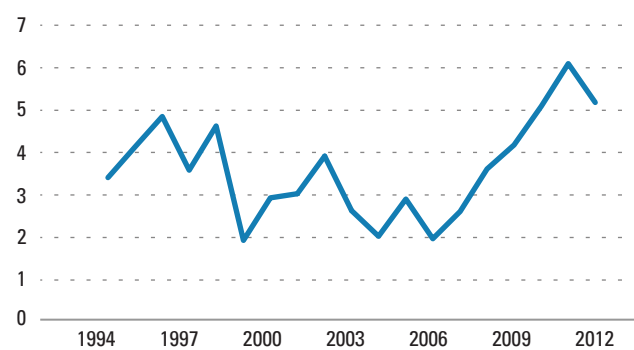
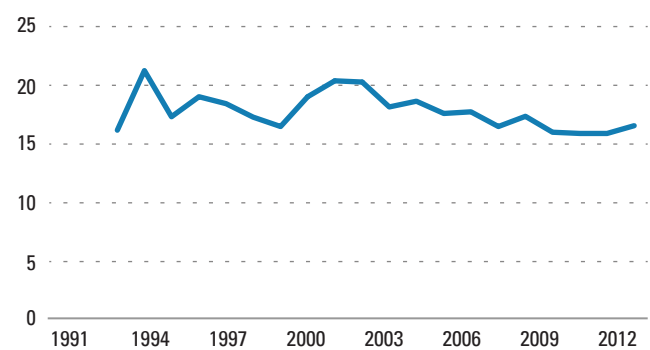
Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## VICTOR VALLEY TRANSIT AUTHORITY DEMAND RESPONSE

## SAN BERNARDINO COUNTY

**Cost per Service Hour****Farebox Recovery****Cost per Passenger Trip****Cost per Passenger Mile****Passengers per Service Hour****Passengers per Service Mile****Fleet Average Vehicle Age****Average Vehicle Speed, in Miles per Hour**

\*Source: NTD 2012

## GOLD COAST TRANSIT



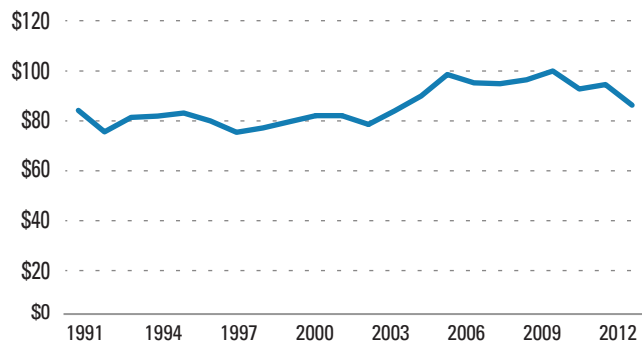
301 E 3rd St  
Oxnard, CA 93030  
<http://www.goldcoasttransit.org/>

<b>Governance Structure</b>	Joint Powers Authority, recognized as a transit district via Assembly Bill 664 commencing July 1, 2014
<b>Base Fare</b>	\$1.50
<b>Day Pass</b>	\$4
<b>Monthly Pass</b>	\$49
<b>Total Operating Budget</b>	\$ 16,607,750
<b>Capital Expenditures</b>	\$ 490,449
<b>Annual Service Provided</b>	198,015 Hours
<b>Service Area</b>	84 Square Miles
<b>Fleet Size</b>	78 Vehicles
<b>Extent of System</b>	370 Directional Route Miles
<b>Span of Service</b>	16 Hours

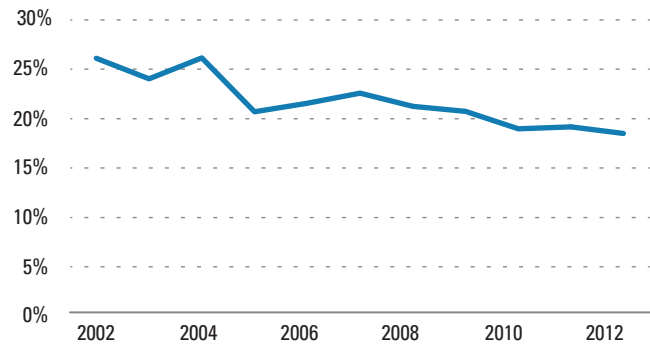
## GOLD COAST TRANSIT FIXED ROUTE

## VENTURA COUNTY

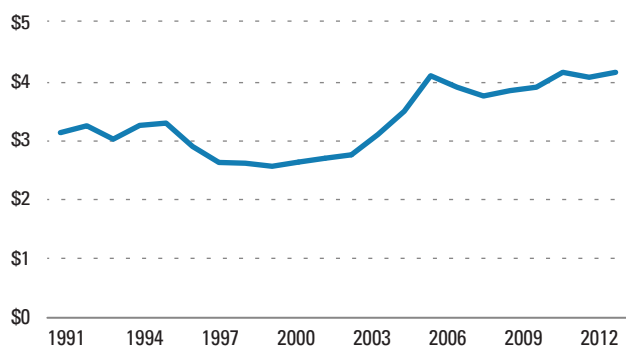
## Cost per Service Hour



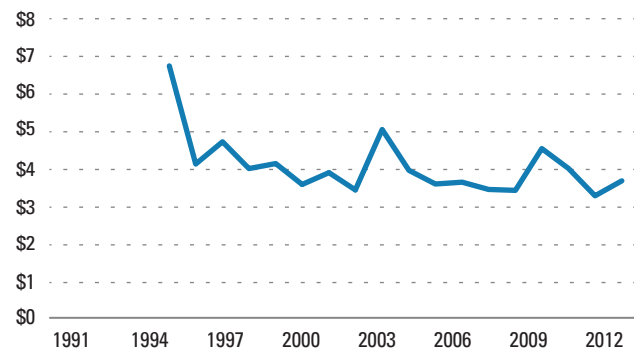
## Farebox Recovery



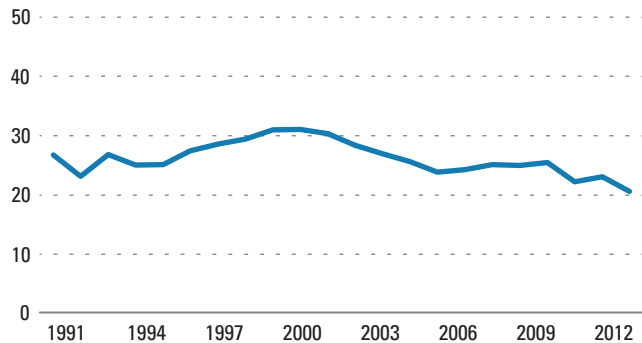
## Cost per Passenger Trip



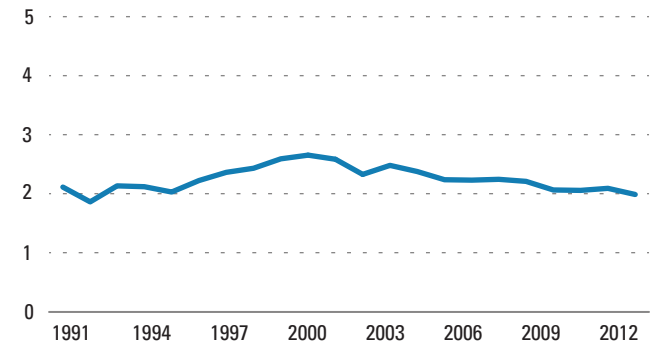
## Cost per Passenger Mile



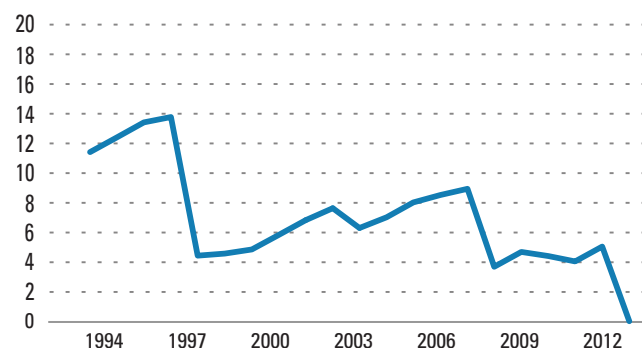
## Passengers per Service Hour



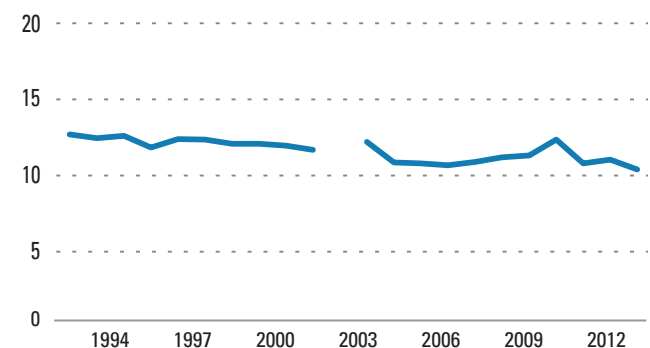
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour

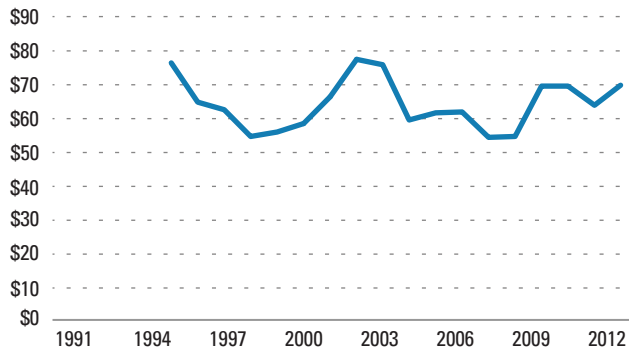


\*Source: NTD 2012

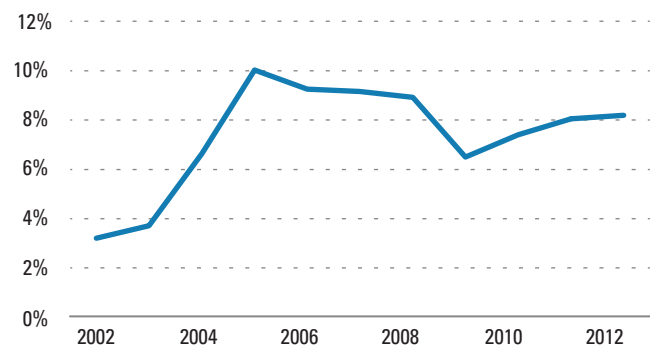
## GOLD COAST TRANSIT DEMAND RESPONSE

## VENTURA COUNTY

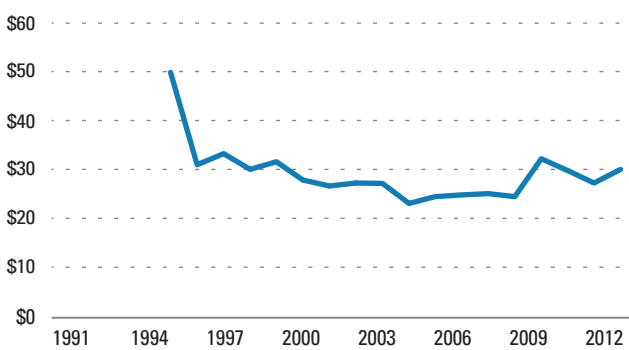
## Cost per Service Hour



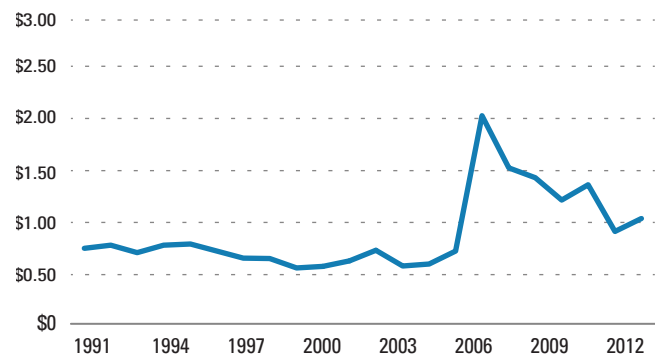
## Farebox Recovery



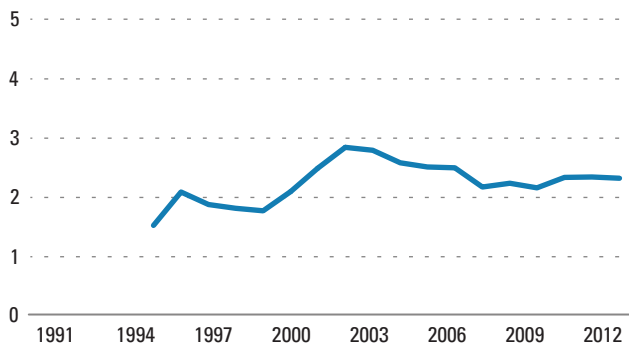
## Cost per Passenger Trip



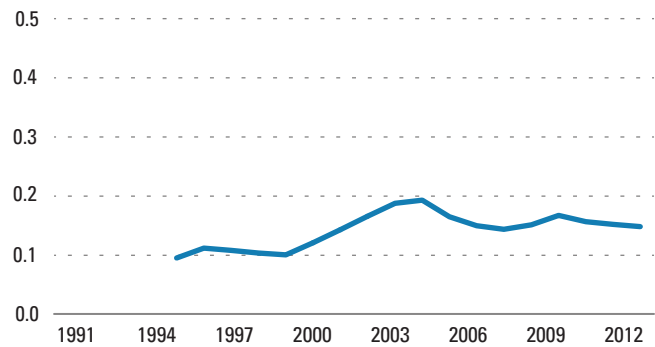
## Cost per Passenger Mile



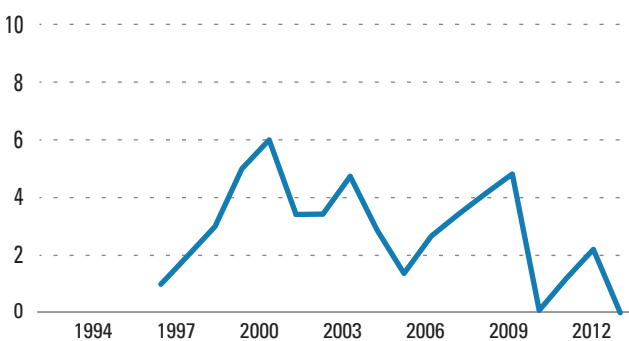
## Passengers per Service Hour



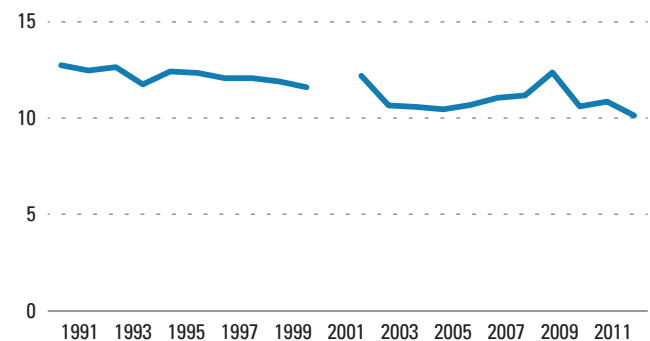
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

## SIMI VALLEY TRANSIT



2929 Tapo Canyon Road Simi Valley, CA 93063 <a href="http://simivalley.org/">http://simivalley.org/</a>	
<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1.25
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	\$40
<b>Total Operating Budget</b>	\$ 5,022,592
<b>Capital Expenditures</b>	\$ 1,139,180
<b>Annual Service Provided</b>	43,262 Hours
<b>Service Area</b>	47 Square Miles
<b>Fleet Size</b>	17 Vehicles
<b>Extent of System</b>	N/A
<b>Span of Service</b>	14 Hours
Please see reporting exceptions list in Appendix C	

## THOUSAND OAKS TRANSIT



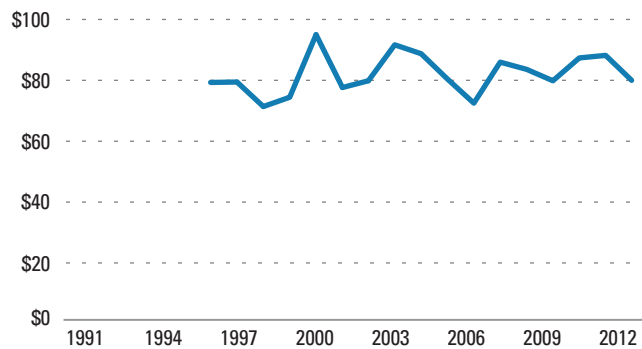
2100 Thousand Oak Boulevard  
Thousand Oaks, CA 91362  
[www.toaks.org](http://www.toaks.org)

<b>Governance Structure</b>	Municipally Owned Transit Property
<b>Base Fare</b>	\$1.50
<b>Day Pass</b>	\$4
<b>Monthly Pass</b>	\$42
<b>Total Operating Budget</b>	\$ 3,450,094
<b>Capital Expenditures</b>	\$ 224,495
<b>Annual Service Provided</b>	49,996 Hours
<b>Service Area</b>	69 Square Miles
<b>Fleet Size</b>	20 Vehicles
<b>Extent of System</b>	N/A
<b>Span of Service</b>	12 hours

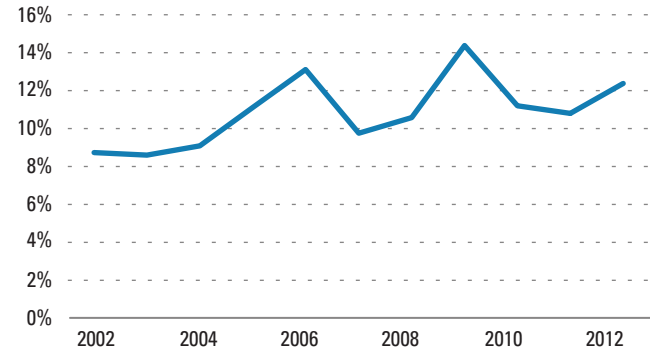
## THOUSAND OAKS TRANSIT FIXED ROUTE

## VENTURA COUNTY

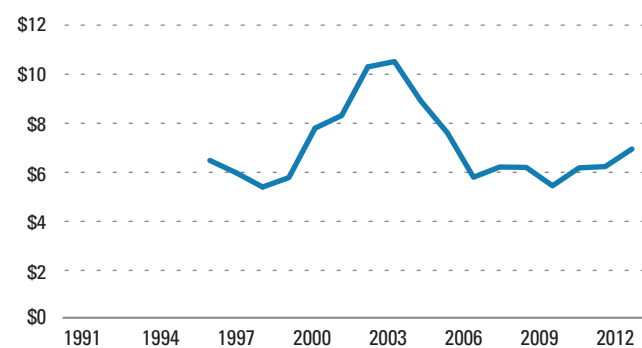
## Cost per Service Hour



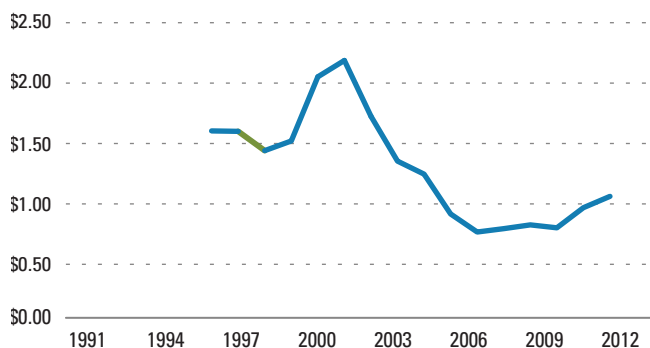
## Farebox Recovery



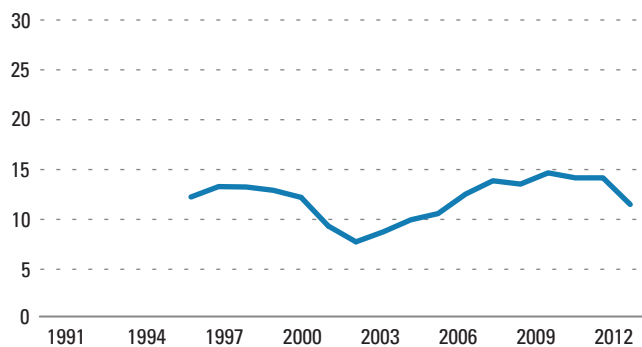
## Cost per Passenger Trip



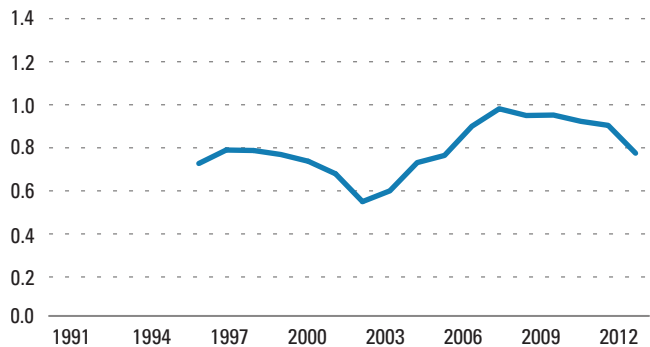
## Cost per Passenger Mile



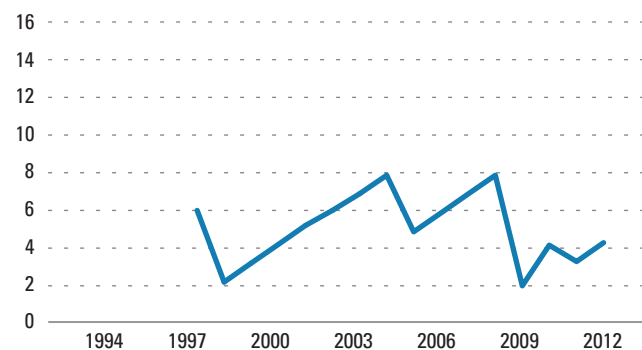
## Passengers per Service Hour



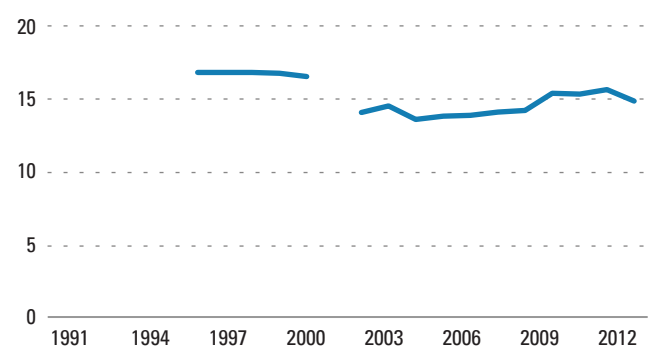
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



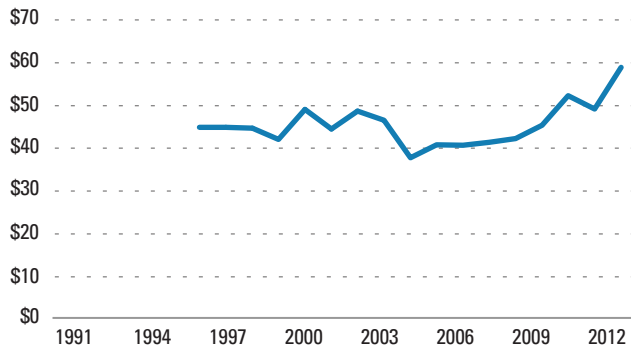
\*Source: NTD 2012



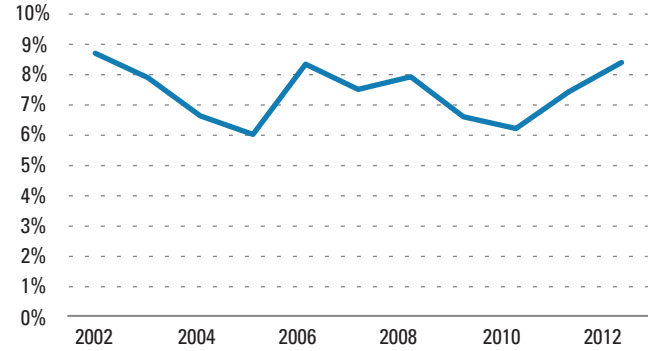
THOUSAND OAKS TRANSIT DEMAND RESPONSE

VENTURA COUNTY

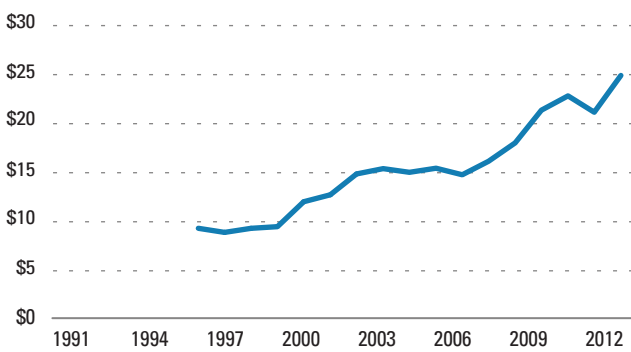
Cost per Service Hour



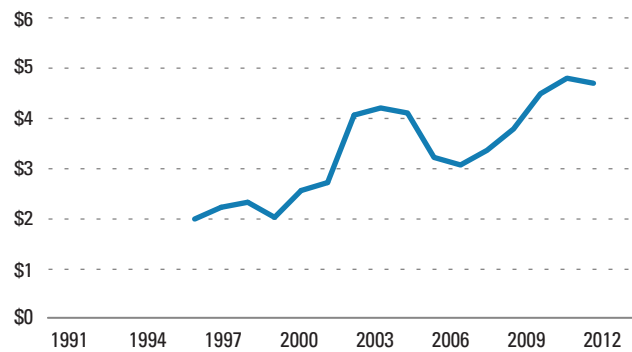
Farebox Recovery



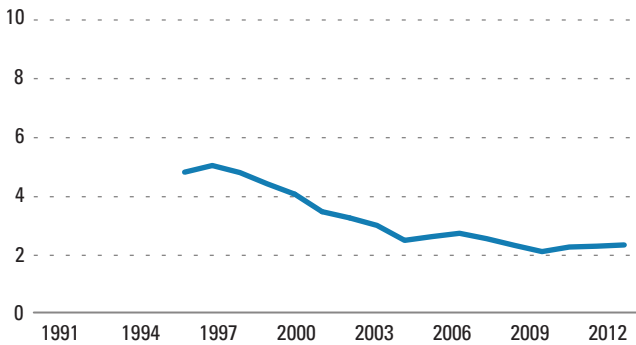
Cost per Passenger Trip



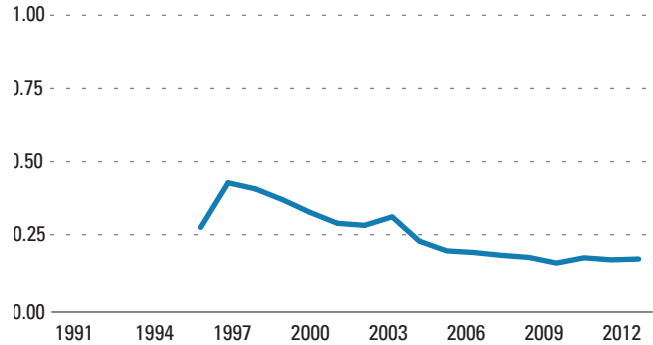
Cost per Passenger Mile



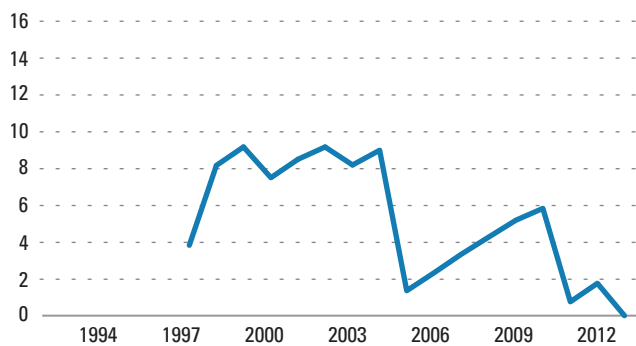
Passengers per Service Hour



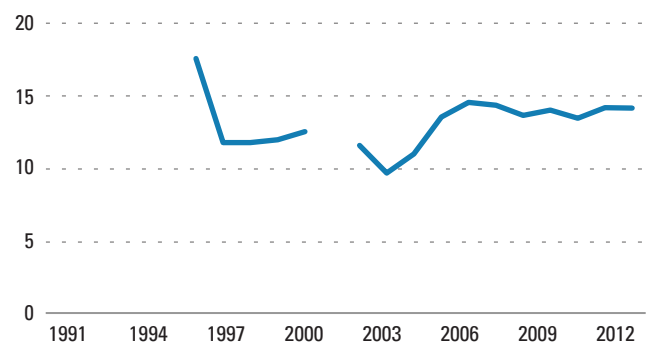
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012

VENTURA INTERCITY SERVICE  
TRANSIT AUTHORITY (VISTA)



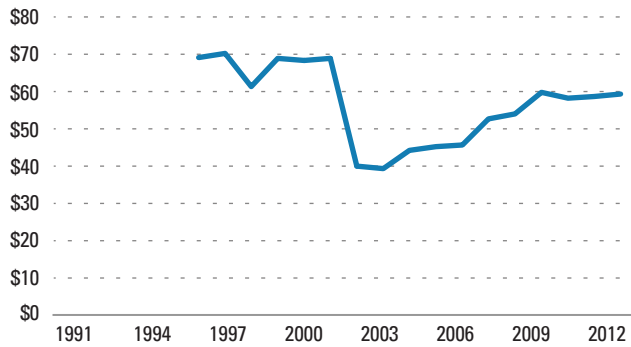
950 County Square Drive, Suite 207  
Ventura, CA 93003  
[www.goventura.org](http://www.goventura.org)

<b>Governance Structure</b>	County Transportation Commission
<b>Base Fare</b>	\$1.25
<b>Day Pass</b>	N/A
<b>Monthly Pass</b>	\$50
<b>Total Operating Budget</b>	\$ 7,904,646
<b>Capital Expenditures</b>	\$0
<b>Annual Service Provided</b>	85,635 Hours
<b>Service Area</b>	28 Square Miles
<b>Fleet Size</b>	46 Vehicles
<b>Extent of System</b>	338 Directional Route Miles
<b>Span of Service</b>	14 Hours

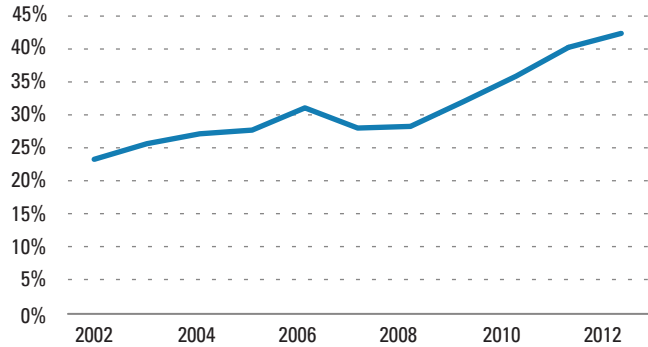
VISTA FIXED ROUTE

VENTURA COUNTY

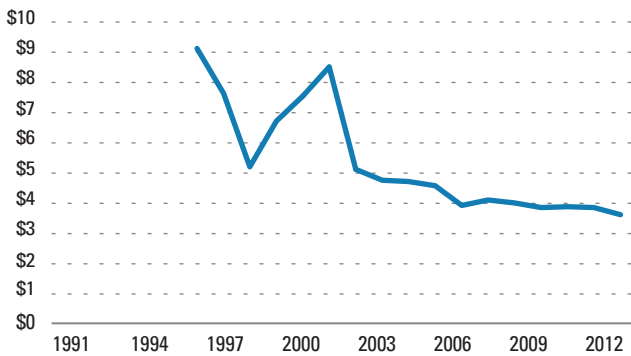
Cost per Service Hour



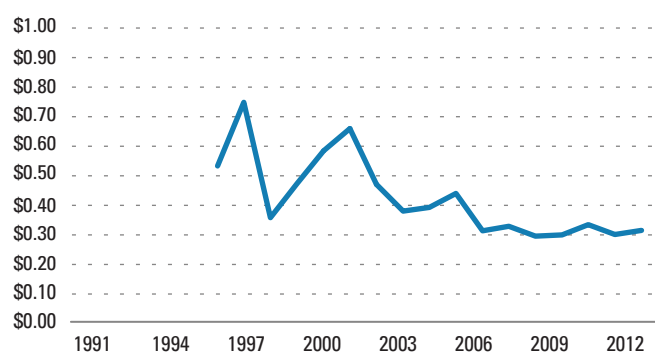
Farebox Recovery



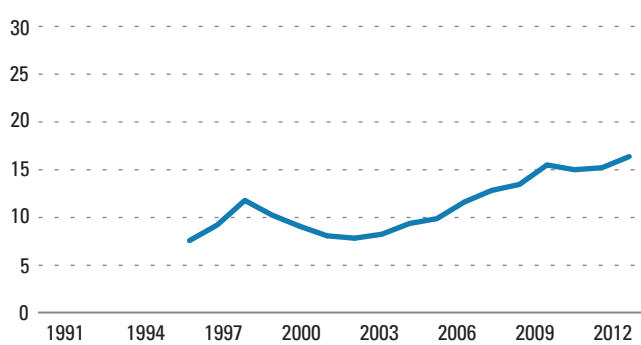
Cost per Passenger Trip



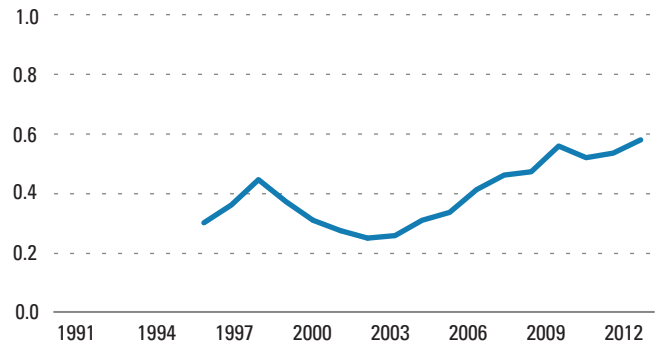
Cost per Passenger Mile



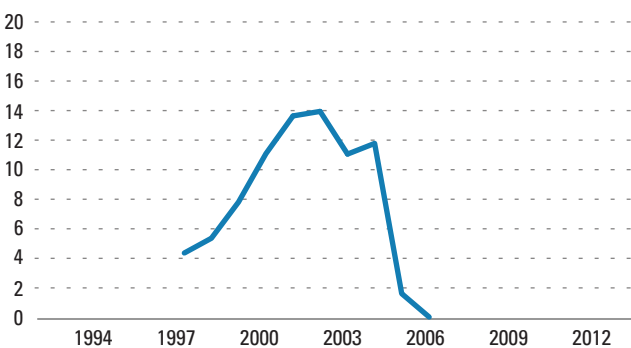
Passengers per Service Hour



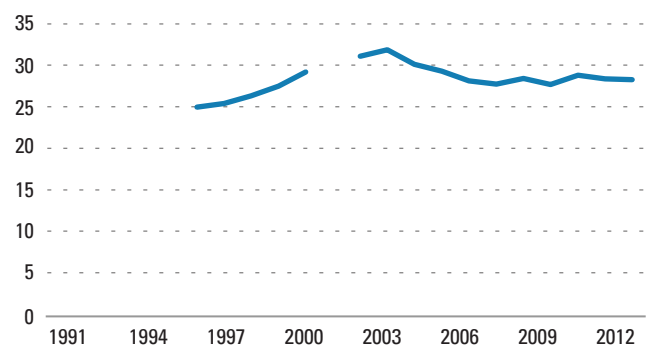
Passengers per Service Mile



Fleet Average Vehicle Age



Average Vehicle Speed, in Miles per Hour

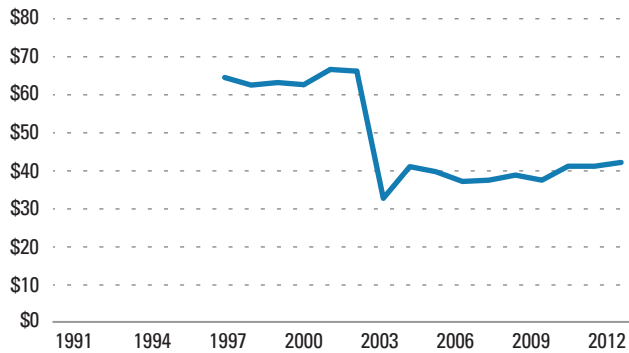


\*Source: NTD 2012

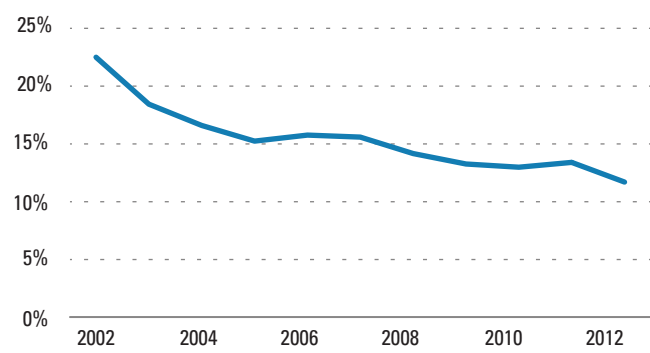
## VISTA DEMAND RESPONSE

## VENTURA COUNTY

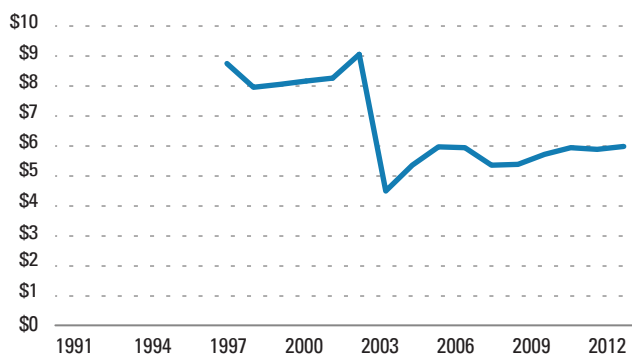
## Cost per Service Hour



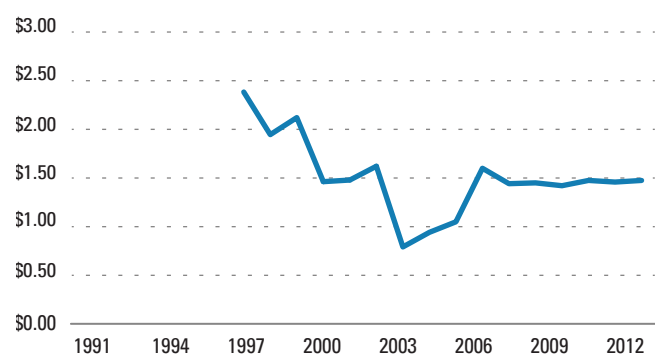
## Farebox Recovery



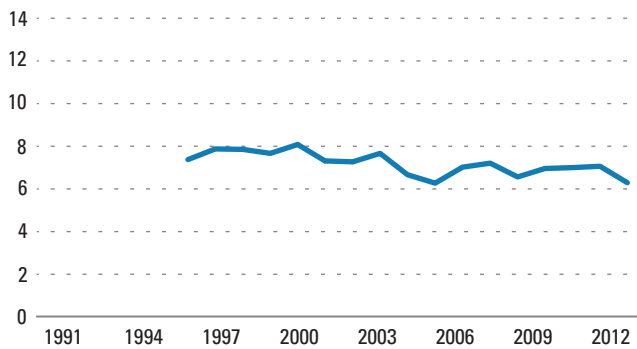
## Cost per Passenger Trip



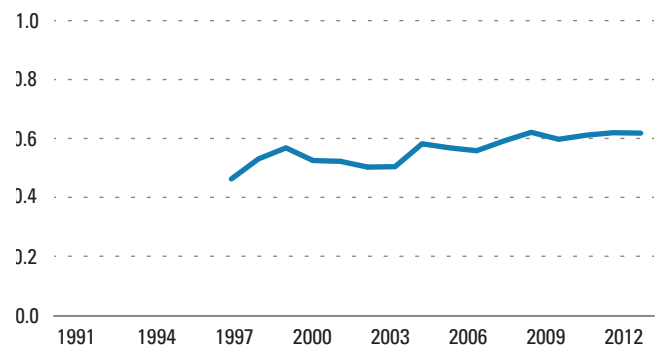
## Cost per Passenger Mile



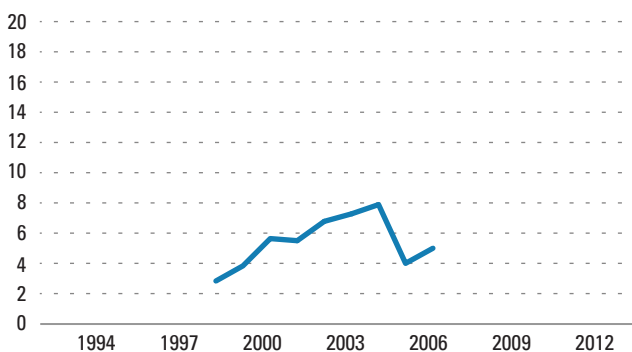
## Passengers per Service Hour



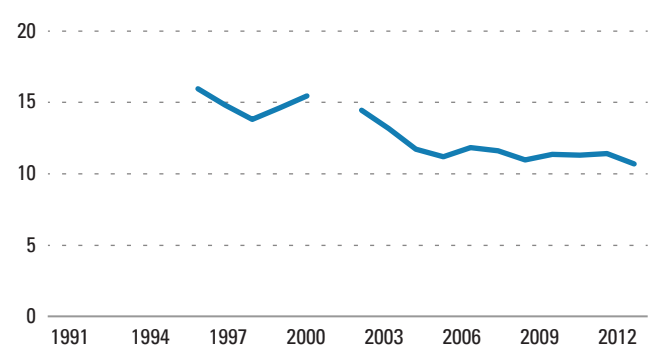
## Passengers per Service Mile



## Fleet Average Vehicle Age



## Average Vehicle Speed, in Miles per Hour



\*Source: NTD 2012



## APPENDIX A

### Transit Governance in the SCAG Region

**TABLE A1 Urbanized Areas (UZAs) within the SCAG Region**

Los Angeles-Long Beach-Anaheim, CA	Santa Clarita, CA
Riverside-San Bernardino, CA	Thousand Oaks, CA
Indio-Cathedral City, CA	Victorville-Hesperia, CA
Lancaster-Palmdale, CA	Camarillo, CA
Mission Viejo-Lake Forest-San Clemente, CA*	El Centro-Calexico, CA
Murrieta-Temecula-Menifee, CA	Hemet, CA
Oxnard, CA	Simi Valley, CA
Yuma, AZ-CA*	

\*Bi-regional/ Bi-state urbanized areas

Source: Census 2000

## TRANSIT GOVERNANCE AND SERVICE AREAS

SCAG is the largest Metropolitan Planning Organization in the United States, consisting of approximately 38,000 square miles and bounded by Mexico, Arizona, and Nevada, in addition to Kern, San Diego and Santa Barbara counties. The region is home to approximately 18 million residents and contains 15 urbanized areas (UZAs), as designated by the United States Census Bureau.

The SCAG Region is also divided into 15 subregional units, most of which are represented by subregional Councils of Government. Two subregions are also county transportation commissions, the Imperial County Transportation Commission (ICTC), and the San Bernardino Associated Governments (SANBAG).

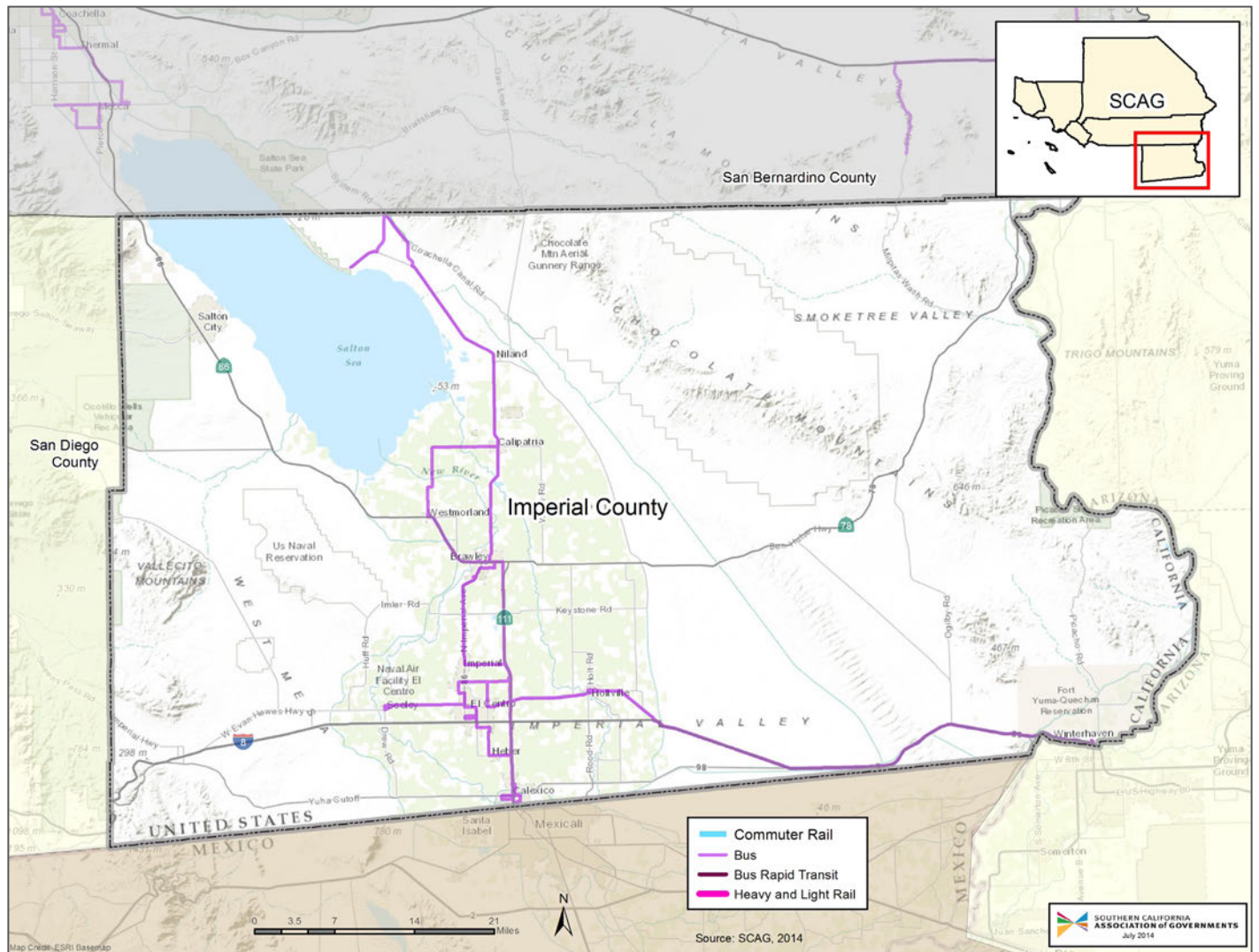
**TABLE A2 Subregions of the SCAG Region**

Arroyo Verdugo Subregion	San Bernardino Associated Governments [SANBAG]
City of Los Angeles	San Gabriel Valley Council of Governments [SGVCOG]
Coachella Valley Association of Governments [CVAG]	San Fernando Valley Council of Governments [SFVCOG]
Gateway Cities Council of Governments [GCCOG]	South Bay Cities Council of Governments [SBCCOG]
Imperial County Transportation Commission [ICTC]	Ventura Council of Governments [VCOG]
Las Virgenes Malibu Council of Governments	Western Riverside Council of Governments [WRCOG]
North Los Angeles County	Westside Cities Council of Governments [WCCOG]
Orange County Council of Governments [OCCOG]	

There are 68 fixed route operators in the region, and over 100 providers of various specialized services, including community circulators, ferries, dial-a-rides, Americans with Disabilities Act (ADA) mandated para-transit, and specialized services operating beyond the ADA.

These agencies are administered through a wide variety of governance structures. The three most significant types are wholly owned municipal transit properties (both fixed route and demand response),

## Imperial County Transit Network

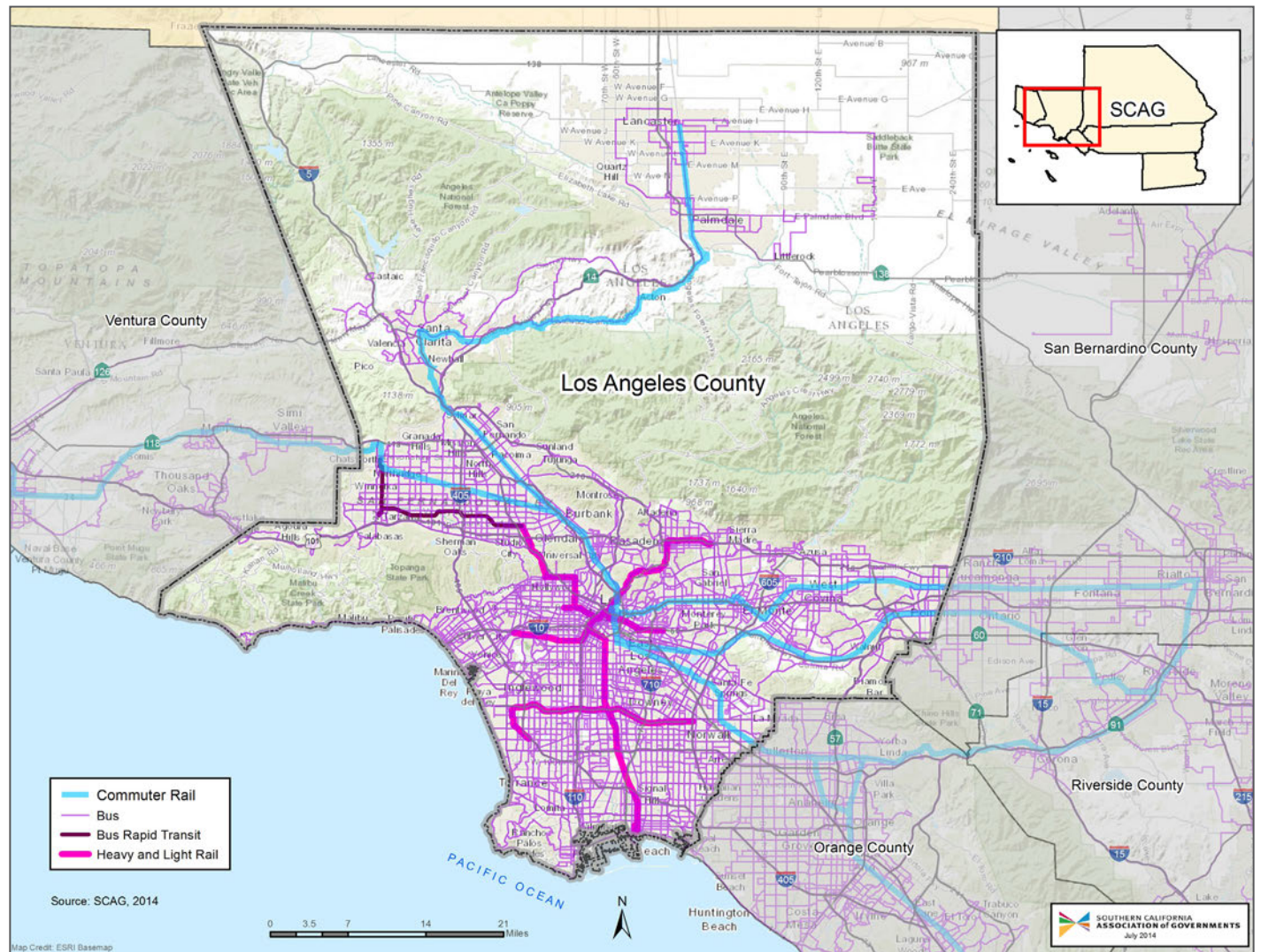


joint powers structures, and four county transportation commissions who also operate transit service. Two of the commissions, the Los Angeles County Transportation Metropolitan Authority (Metro), and the Orange County Transportation Authority (OCTA), are also designated as transit districts by the State of California. The Ventura County Transportation Commission (VCTC) and Imperial County Transportation Commission (ICTC) also operate transit service.

Seven Joint Powers Authority (JPA) operators provide fixed route bus service at a subregional scale through multiple jurisdictions. These include the Antelope Valley Transit Authority (AVTA), Foothill Transit, Gold Coast Transit, Omnitrans, Riverside Transit Agency (RTA), SunLine Transit Agency, and Victor Valley Transit Authority (VVTA). Additionally, the Southern California Regional Rail Authority operates commuter rail service under the Metrolink service brand at a regional scale.



## Los Angeles County Transit Network



### IMPERIAL COUNTY

Within Imperial County, the bulk of service is operated by Imperial Valley Transit, a service brand of the Imperial County Transportation Commission (ICTC). IVT currently operates service between municipalities in the Imperial Valley, and is seeking to establish a series of local circulators. The services are a mix of small urban and rural transit services. Circulator services are also historically provided within the City of Calexico by the Calexico Transit System.

In addition, the Yuma County Intergovernmental Public Transportation Authority (YCIPTA) provides local services in the Yuma AZ - CA UZA under the Yuma County Area Transit service brand, including the community of Winterhaven and Quechan Tribal Lands in the SCAG Region. YCIPTA also provides an express service between Yuma and El Centro on Mondays, Wednesdays, and Saturdays.

### LOS ANGELES COUNTY

Los Angeles County is one of the most robust transit



**TABLE A3 Municipal Operators of Los Angeles County**

Agency	Structure	Service Area
<b>Arcadia Transit</b>	Municipally Owned	City of Arcadia
<b>AVTA</b>	JPA	Lancaster-Palmdale UZA
<b>Beach Cities Transit</b>	Municipally Owned	Western South Bay Subregion
<b>Commerce Municipal Bus Lines</b>	Municipally Owned	City of Commerce and surrounding communities
<b>Culver City Municipal Bus Lines</b>	Municipally Owned	City of Culver City and surrounding communities
<b>Foothill Transit</b>	JPA	San Gabriel Valley Subregion
<b>Gardena Municipal Bus Lines</b>	Municipally Owned	Northern South Bay Cities Subregion
<b>LADOT</b>	Municipally Owned	Local Circulators throughout City of Los Angeles
<b>La Mirada Transit</b>	Municipally Owned	Northern Gateway Cities, near City of La Mirada
<b>Long Beach Transit</b>	Municipally Owned	Southern Gateway Cities
<b>Montebello Bus Lines</b>	Municipally Owned	North Western Gateway Cities
<b>Norwalk Transit System</b>	Municipally Owned	Eastern Gateway Cities
<b>Santa Clarita Transit</b>	Municipally Owned	Santa Clarita UZA
<b>Santa Monica's Big Blue Bus</b>	Municipally Owned	Cities of Santa Monica, Culver City and Los Angeles (Westside Cities Subregion)
<b>Torrance Transit System</b>	Municipally Owned	Southern South Bay Cities

markets in the nation. The Los Angeles- Long Beach- Anaheim CA UZA, composed primarily of Los Angeles and Orange Counties, provided the second largest share of transit trips, service hours, and service miles of all UZAs nationally in FY2011-12. Agencies in the Los Angeles-Long Beach-Anaheim CA UZA also provided the third largest total of passenger miles travelled nationally. Given the size and productivity of transit service in Los Angeles County, it's no surprise that transit service provision is extraordinarily complex.

Transit service in LA County can be divided into three categories—Metro service, the LA County Municipal Operators, and local and specialized providers.

► **METRO:** Metro is typically the 3rd or 4th largest provider of transit trips in the US in any given year, and provides the vast bulk of all transit trips in the SCAG Region. Their service area includes the portions of Los Angeles County south of the Angeles National Forest. Metro operates multiple transit modes, including light rail, heavy rail, bus rapid transit and fixed route bus services. In cities or subregions where there are local operators, Metro often operates trunk routes and serves long distance markets. Metro funds Metrolink service in LA County.

Metro is a designated transit district per Chapter

4, Article 1, Section 99213 of the California Public Utilities Code<sup>i</sup>.

- **LA COUNTY MUNICIPAL OPERATORS:** The municipal operators of transit, called the ‘Munis,’ consist of thirteen municipal transit properties and two joint powers operators. These operators are designated as eligible recipients of federal formula funds via Chapter 4, Article 1, Section 99207.5 of the California Public Utilities Code. Most offer fixed route services between jurisdictions, though the municipal operators service areas tend to be centered around the jurisdiction that owns them. In most cases, these operators provide the bulk of local trips within their service area while Metro service is overlaid to support longer distance trips<sup>ii</sup>.

Some of the Munis have fairly small service areas, such as Beach Cities or Culver City Transit. Others, including Long Beach Transit and Foothill Transit, have very large service areas. Foothill is a JPA operator serving as the primary fixed route operator in the San Gabriel Valley, an LA County subregion with two million residents. AVTA is a JPA and the sole provider of fixed route bus service in the Lancaster-Palmdale UZA.

- **SPECIALIZED AND LOCAL OPERATORS:** Local circulator and demand response services are provided by a variety of transit properties throughout LA County. Access Services of Los Angeles, Incorporated, is the largest provider of ADA paratransit trips in the county, and provides some or all complimentary ADA paratransit service for Metro and various municipal bus operators. ASI’s service area includes the entire county, and they are unique in that respect.

Similarly, the Pomona Valley Transit Authority is a JPA providing demand response service in eastern Los Angeles County.

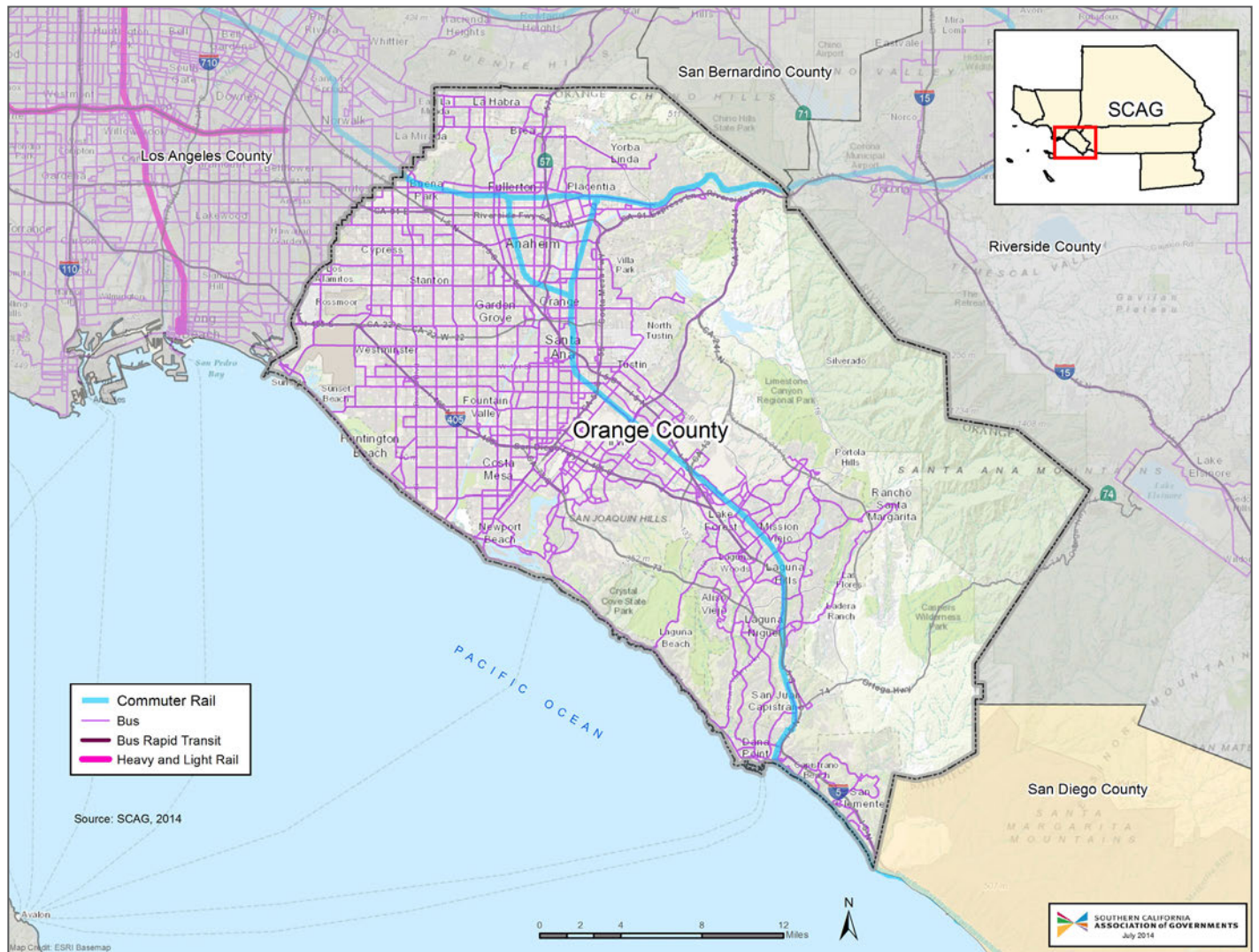
More localized providers are referred to as the “local operators.” They are typically municipally owned and provide demand response or circulator services within jurisdictional boundaries. These operators are represented in the planning process via Metro’s Local Transportation Systems Subcommittee (LTSS) of the Technical Advisory Committee.

The American Public Transportation Authority’s (APTA) 2013 Public Transportation Fact Book illustrates the size and complexity of the transit system in Los Angeles County. In FY2011-12, Metro was the second largest provider of bus passenger trips and passenger miles in the nation, and LADOT, Foothill Transit, Long Beach Transit, and Santa Monica’s Big Blue Bus also ranked in the top fifty largest providers of passenger trips and passenger miles. LADOT was also the third largest provider of commuter bus trips, while Metro was the largest provider of light rail passenger miles, and the third largest provider of light rail trips in the country. The LTSS operators, together as a group, provided the 18th largest total of demand response trips in the nation, and Access Services provided the second largest total<sup>iii</sup>.

## ORANGE COUNTY

Within Orange County, OCTA operates the second largest fixed route bus transit fleet in the SCAG Region, and was the nation’s 22nd largest provider of transit trips and 20th largest provider of passenger miles in FY2011-12. Additionally, OCTA operates ADA paratransit and funds Metrolink commuter rail service. The cities of Anaheim and Laguna Beach operate local

## Orange County Transit Network



circulator service, and the cities of Anaheim and Santa Ana are in the project development pipeline to implement rail circulators. The City of Irvine also provides transit service through the City of Irvine iShuttle.

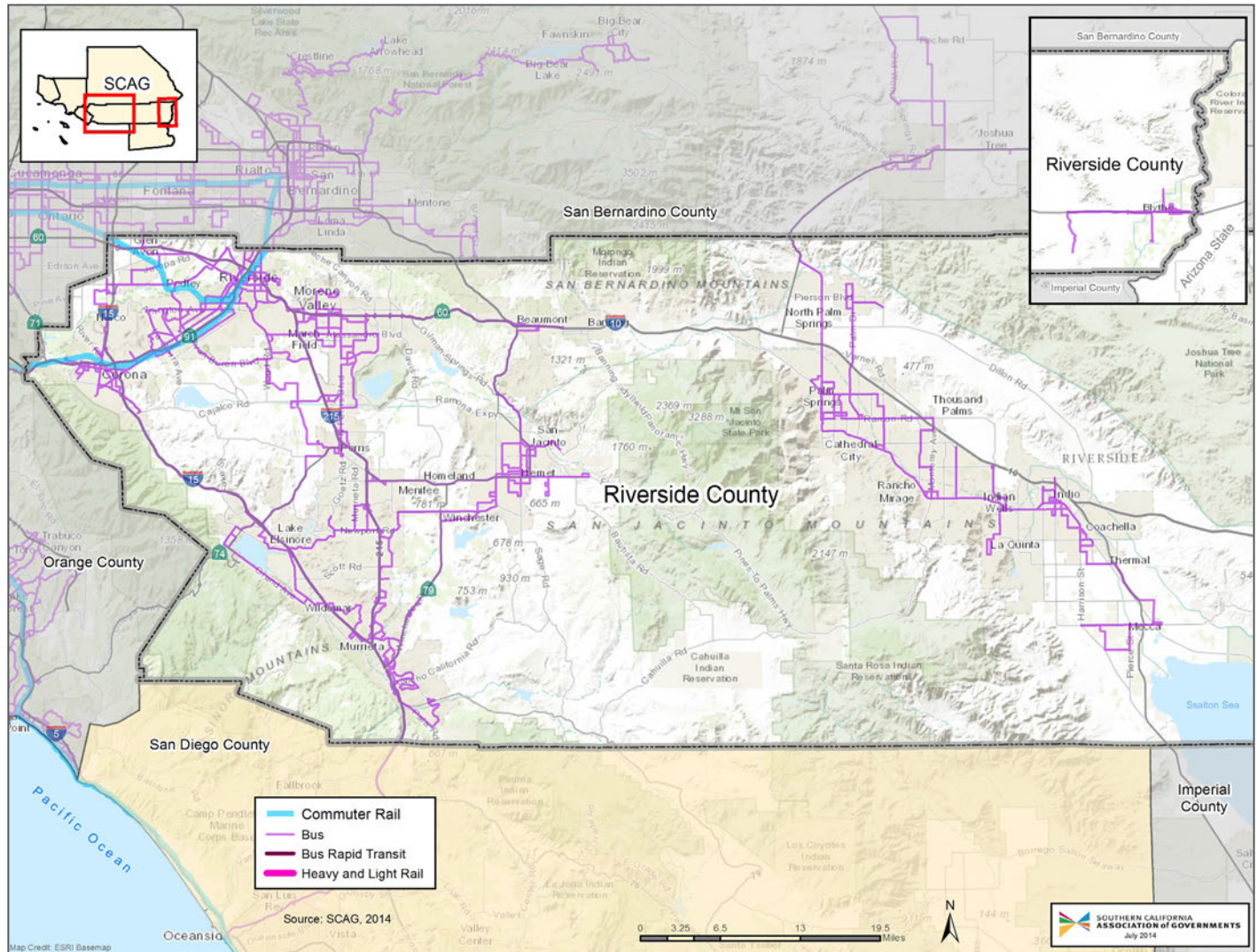
OCTA is a designated transit district per Chapter 4, Article 1, Section 99213 of the California Public Utilities Code<sup>iv</sup>.

## RIVERSIDE COUNTY

In Riverside County, fixed route bus service is primarily operated by RTA and SunLine Transit. RTA's service area is the western half of Riverside County, and SunLine's service area is the Coachella Valley. The Riverside County Transportation Commission (RCTC) funds the county's participation in regional commuter rail service via Metrolink, and the cities of Riverside and Corona respectively operate demand response and local circulator service.



## Riverside County Transit Network



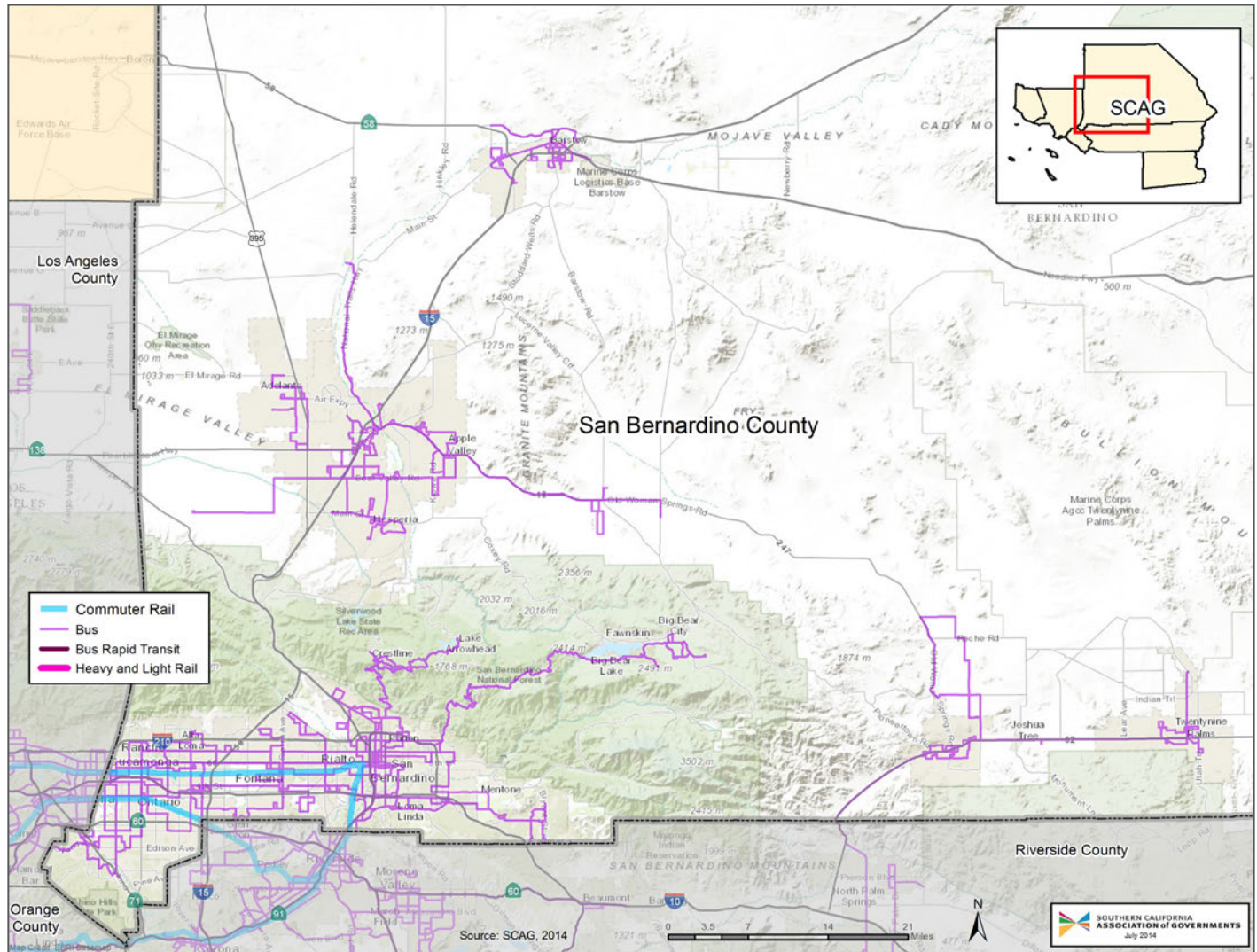
Rural transit service in southwestern Riverside County is provided by the Reservation Transportation Authority, a collaborative of 18 federally recognized tribal groups. The cities of Banning and Beaumont also provide service via the Pass Transit service brand, and Desert Roadrunner service is provided in the City of Blythe and unincorporated eastern Riverside County by the Palo Verde Valley Transit Agency.

SAN BERNARDINO COUNTY

OmniTrans is the largest agency in southern San Bernardino County, and the Victor Valley Transit Authority (VVTA) provides fixed route service in the Victorville-Hesperia UZA. The San Bernardino Associated Governments (SANBAG) funds the county's participation in Metrolink.

Rural fixed route transit is provided by several operators in San Bernardino County, including the Mountain Area Regional Transit Authority (MARTA), the Morongo

## San Bernardino County Transit Network



Basin Transit Authority (MBTA), Needles Area Transit, and Barstow Area Transport.

### VENTURA COUNTY

The largest operator of fixed route bus service in Ventura County is Gold Coast Transit. Their service area is centered on the western end of the county, and extends as far north as the city of Ojai. Simi Valley Transit, Thousand Oaks Transit, Moorpark City Transit, and Camarillo Area Transit are municipally owned transit properties providing service within their

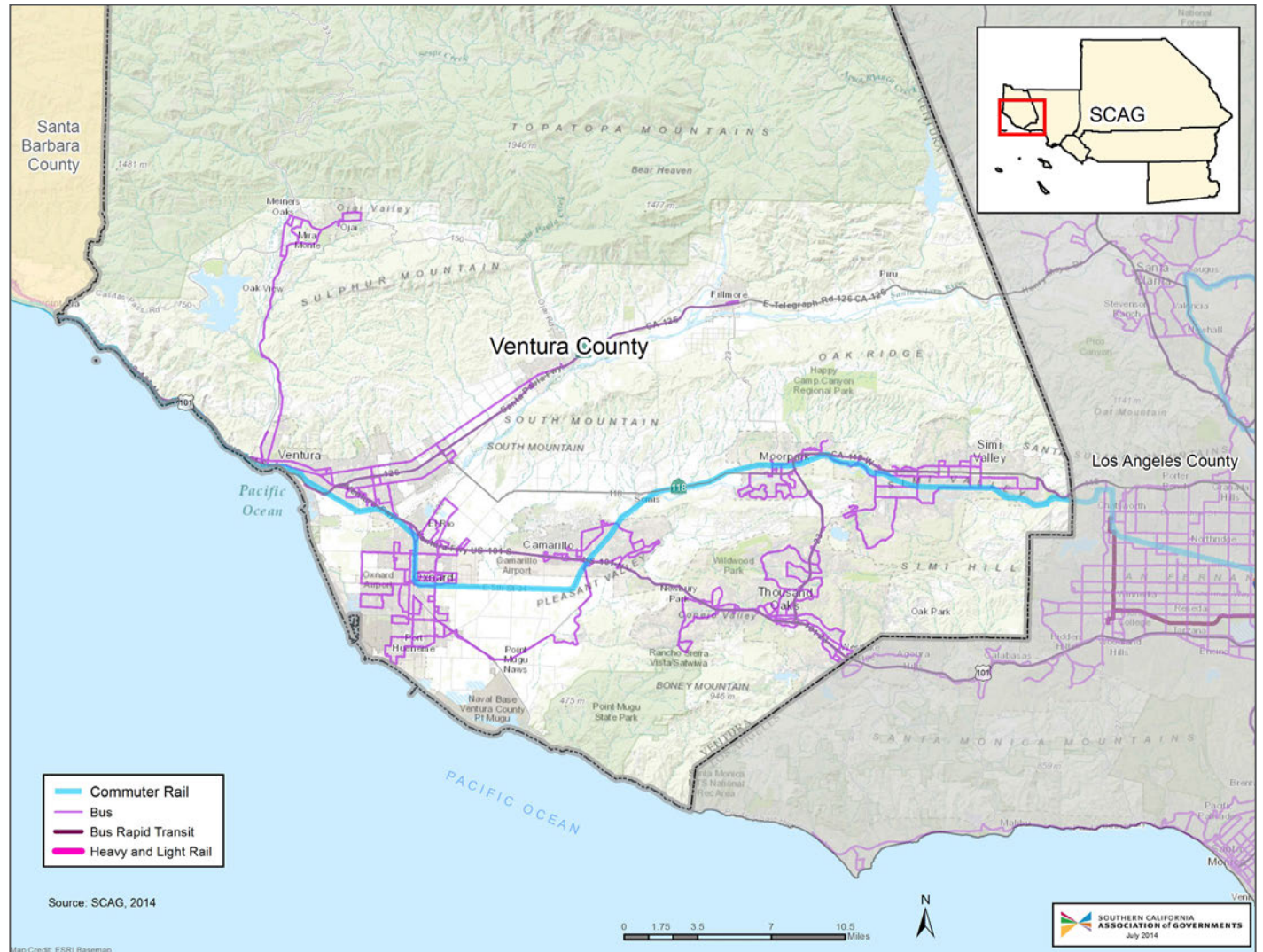
respective jurisdictions. The Ventura Intercity Service Transit Authority (VISTA) operates service between jurisdictions. VCTC owns and operates VISTA, and also funds Ventura County's participation in Metrolink. The Ojai Trolley provides rural transit service in and around the City of Ojai.

### INTERREGIONAL SERVICES

In addition to the services listed above, several transit agencies provide service outside the boundaries of the SCAG Region. VISTA in Ventura County provides



## Ventura County Transit Network



service into neighboring

Santa Barbara County. The Eastern Sierra Transit Authority provides thrice weekly service to Mammoth via the Owens Valley, with connections to Reno, Nevada and Yosemite National Park. In the Southern

End of the Region, RTA and Metrolink provide service into San Diego County. And YCIPTA also provides an express service between Yuma, Arizona and El Centro on Mondays, Wednesdays, and Saturdays.

<sup>i</sup> California Department of Transportation, Mass Transit Division, *Transit Development Act Statutes and California Codes of Regulations*

<sup>ii</sup> California Department of Transportation, Mass Transit Division, *Transit Development Act Statutes and California Codes of Regulations*

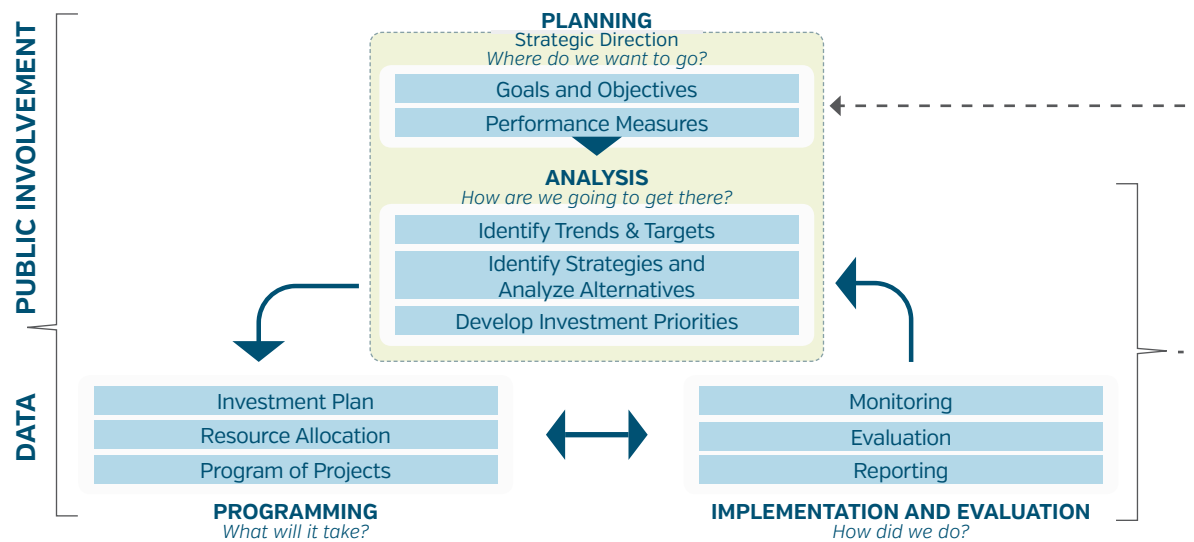
<sup>iii</sup> American Public Transportation Association, *2013 Public Transportation Fact Book*, page 37

<sup>iv</sup> California Department of Transportation, Mass Transit Division, *Transit Development Act Statutes and California Codes of Regulations*



## APPENDIX B

### Transit System Performance Measures

**FIGURE B1 The Performance Based-Planning Process under MAP-21**

## PERFORMANCE MANAGEMENT

Since the passage of the United States Government Performance and Results Act of 1993, the federal government has advised MPOs to integrate performance management into their business practices and long range plans<sup>i</sup>. The initial federal guidance on performance consisted of:

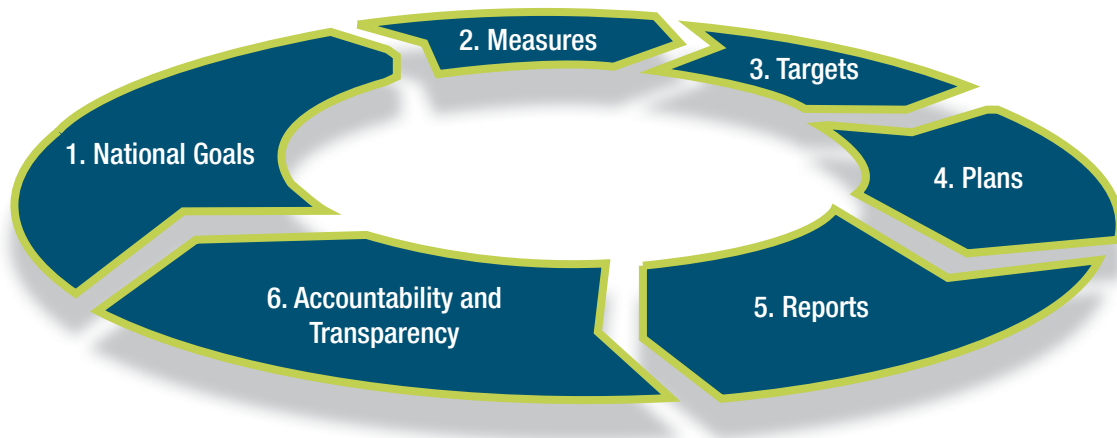
- ▶ Enacting agency mission statements
- ▶ Generating outcome oriented goals and objectives
- ▶ Employing specific performance objectives expressed in quantifiable and measurable forms
- ▶ Identification of performance measures or indicators to be used in measuring or assessing relevant outputs, service levels, and outcomes
- ▶ Description of how performance measures relate to goals and objectives
- ▶ A discussion of how actual performance relates to stated goals

- ▶ Identification of those factors beyond and agency's control that could affect performance
- ▶ A description of the resources required to achieve the performance goals

The US DOT defines performance based planning and programming as an approach to applying performance management principles to transportation system policy and investment decisions. It is a data-driven process that can identify strategies and investments at the system or corridor levels, and can “provide a nuanced means of assessing progress toward meeting the intent of the RTP”<sup>ii</sup>.

Within the context of transportation planning, the Federal Highway Administration (FHWA) defines performance based planning as “selecting investments to most effectively and efficiently achieve desired outcomes, as determined through public input and agency strategic direction. A Performance Based Planning and Programming (PBPP) process becomes cyclical with information on the performance of the



**FIGURE B2 The Transportation Performance Management Process**

Source: Federal Highway Administration (FHWA)

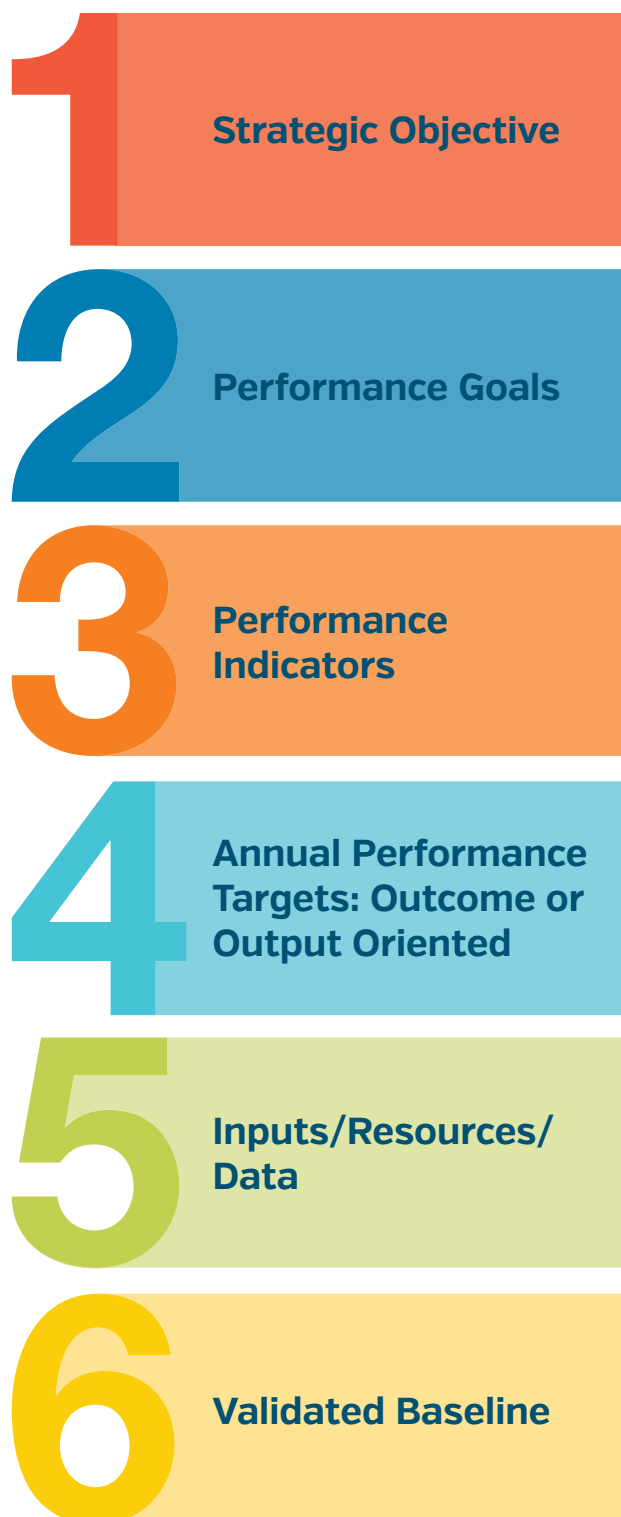
system and the expected benefits of system improvements strategically directing investments.” Figure B1, outlines the cyclical nature of the PBPP process<sup>iii</sup>.

The FHWA sees performance based planning processes as potentially integrated into all of the processes of MPOs. The text below, quoted from the FHWA’s *Performance Based Planning and Programming Guidebook*, outlines the benefits of integrating performance based processes into statewide and metropolitan planning processes.

“Performance-based planning and programming (PBPP) refers to the application of performance management within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system. This includes a range of activities and products undertaken by a transportation agency together with other agencies, stakeholders, and the public as part of a 3C [cooperative, continuing, and comprehensive] process. It includes development of: long range transportation plans [LRTPs], other plans and processes [including those Federally-required,

such as Strategic Highway Safety Plans, Asset Management Plans, the Congestion Management Process, Transit Agency Asset Management Plans, and Transit Agency Safety Plans, as well as others that are not required], and programming documents, including State and metropolitan Transportation Improvement Programs [STIPs and TIPs]. PBPP attempts to ensure that transportation investment decisions are made – both in long-term planning and short-term programming of projects – based on their ability to meet established goals”<sup>iv</sup>.

The Federal Transit Administration’s (FTA’s) *Policy on Performance Measurement* provides a framework for refining the administration’s performance measures and ensuring consistency in measures. The policy stresses the importance of linking measures to goals, providing clear, concise measures, and starting from a validated baseline. As illustrated in Figure B3, the integration of goals, targets, indicators and a validated background is important to accurately measuring the impact of plans and policies in the transportation planning process.

**FIGURE B3 Fully Integrated Performance Management Goal Structure**

Source: FHWA, FTA)

**MAP-21 and Performance Based Planning**

MAP-21 continues to reinforce the importance of performance based planning in the RTP process, while also reinforcing the importance of maintaining a state of good repair for transportation infrastructure and assets.

SCAG has incorporated performance based planning aspects of performance management into its Regional Transportation Plans (RTPs) since 1998 and has encouraged performance based planning throughout the region. For the 2004 RTP, SCAG developed a set of measurable goals and outcomes that included the principal of sustainability, which is not limited only to the environment and the transportation-land use connection, but also has important implications on how the region meets its critical system preservation needs:

- ▶ Safety
- ▶ Infrastructure Condition
- ▶ System Reliability
- ▶ Freight Movement and Economic Vitality
- ▶ Environment sustainability; and
- ▶ Reduced project delivery delays

The legislation amends 23 U.S.C 150(c) to require MPOs to work in collaboration with transit agencies and state DOTs to establish performance measures consistent with performance targets related to transit asset management and transit safety, as set forth in 49 U.S.C. 5326(c) and 5329(d).

MAP-21 also mandates RTPs must employ performance based planning, that RTPs must include a System Performance Report, and that Federal Transportation Improvement Programs (FTIP) must include

“a description of the anticipated progress brought about by implementing the FTIP towards achieving the performance targets.”

The FHWA and the FTA have outlined a process for the incorporation of performance based planning into the transportation planning process. FHWA’s six-step transportation planning process is outlined in Figure B-3. The nine rulemaking processes that will implement the MAP-21 performance requirements will affect the transportation planning process in a variety of ways, but the Metropolitan and Planning Statewide rulemaking will establish performance based planning processes at the state and regional levels, and establish coordination procedures for establishing of performance targets, and linking of those targets to the planning and programming processes.

### Performance Measure Selection

This report is an incremental step towards producing a System Performance Report for the 2016 RTP/SCS, and the incorporation of an annual review of system performance geared towards planning for operations and maintenance into SCAG’s transit modal planning practices. Similar to the Metropolitan Transportation Commission’s (MTC) of the *Statistical Summary of Bay Area Transit Operators*, this report provides an annual format for measuring system performance, through the analysis of data reported by transit operators to the National Transit Database (NTD). The incorporation of a transit property into this analysis is therefore contingent upon a steady report of performance data to the NTD.

## TRANSIT SYSTEM PERFORMANCE MEASURES

The 2010 *Regional Transportation Plan Guidelines* adopted by the California Transportation Commission (CTC) provides guidance in the use of performance

measurement in regional planning. The Guide defines performance measures as a set of “objective, measurable criteria used to evaluate the performance and effectiveness of the transportation system, government policies, plans and programs. Performance measures use statistical evidence to determine progress toward specific and defined objectives.” Performance measures can be quantitative or qualitative, and should “help set goals and outcomes, detect and correct problems, and document accomplishments”<sup>v</sup>.

Performance measurement can occur at the regional or corridor level, and at either the system or a project by project basis. The CTC’s State Transportation Improvement Program (STIP) Guidelines establish performance criteria at both the project and the system level. The guidelines provide the following examples of appropriate system performance measures:

- ▶ Safety
- ▶ Mobility
- ▶ Accessibility
- ▶ Reliability
- ▶ Productivity/Throughput
- ▶ System Preservation
- ▶ Return on Investment/Lifecycle Cost

### Performance Measurement in the 2012-2035 RTP/SCS

The adopted performance measures for the 2012-2035 RTP/SCS are outlined in the fifth chapter of the plan, and further discussed in the plan’s performance measurement appendix. In addition to the traditional measures of mobility and economic impact, the adopted performance measures also included two new categories: location efficiency and public

health. As below detailed in Table B1, the adopted performance measures focus on outcomes mostly related to land use, air quality, congestion related delay, road safety, and economic impacts of planned investments.

Given the system performance mandates contained in MAP-21, the 2016 RTP/SCS will need to incorporate more multimodal measures within its adopted measures, possibly including transit specific measures. As a result, this report will also inform the process for selecting the measures to be included in the System Performance Report component of the 2016 RTP/SCS. Furthermore, as the Federal Transit Administration completes its rulemaking processes regarding MAP-21, staff will have to incorporate new transit specific measures into the 2016

RTP/SCS, including safety and state of good repair measures. This iteration of the system performance report functions to begin the discussion as to what other transit modal performance measures should also be included in the 2016 RTP/SCS.

### Transit Performance Measurement Systems

The *Transit Cooperative Research Program Report 088: A Guide Book for Developing a Transit Performance Measurement System* divides transit performance measures into eight distinct categories. These categories are displayed in Table B2<sup>vi</sup>.

These performance measurement categories can also be broken into four levels of analysis. These include the Agency, the Customer, the Vehicle/Driver, and the Community levels.

**The Customer level of analysis** usually includes measures of service availability, comfort and quality of service, most especially relating to comfort and convenience. Performance measures within the travel time, availability, service delivery, safety and security, and maintenance and construction categories are applicable to this level of analysis.

**The Agency level of analysis** is more concerned with the efficiency and effectiveness of transit operations. Appropriate categories include maintenance and construction and economic measures. Due to the availability of NTD cost and utilization data, the agency level is among the most commonly analyzed.

**The Vehicle/Driver point of view** includes measures of vehicular speed and delay, such as those routinely calculated for streets and highways as proscribed in the Institute for Transportation Engineers (ITE) Highway Capacity Manual. Vehicle/Driver measures can also include measures of facility or guideway capacity. Examples include average vehicle speed, volume/capacity ratios, roadway capacity, and vehicular capacity. Within the context of transit, the measures often focus on the performance of an individual route or run.

**Measures at the Community level** assess transit's role in meeting broad community objectives. The impact of transit service on different aspects of a community, including economic growth, property values, and employment, mobility and the environment are among the most common community level measures.

**TABLE B1 Adopted Performance Measures from the 2012-2035 RTP/SCS**

Outcome	Performance Measure/Indicator	Definition
<b>Location Efficiency</b>	Land consumption (total & per capita)	Total and per capita of land areas used development
	Median distance for work and non-work trips	The travel distance from which half of the work or non-work trips exceed and the other half below
	Percent of work trips less than 3 miles	The share of total work trips which are fewer than 3 miles
	Share of growth in transit priority areas	Share of the region's growth in population, households and employment in transit priority areas
	Work trip length distribution	The statistical distribution of work trip length in the region
<b>Mobility/ Accessibility</b>	Person delay per capita	Delay per capita can be used as a supplemental measure to account for population growth impacts on delay
	Person delay by facility type (mixed flow, HOV, arterials)	Delay – excess travel time resulting from the difference between a reference speed and actual speed
	Truck delay by facility type (Highway, Arterials)	Delay – excess travel time resulting from the difference between a reference speed and actual speed
	Travel time distribution for transit, SOV, HOV for work and non-work trips	Travel time distribution for transit, SOV, HOV for work and non-work trips
<b>Safety and Health</b>	Collision/accident rates by severity by mode	Accident rates per million vehicle miles by mode (all, bicycle/pedestrian and fatality/killed)
<b>Environmental Quality</b>	Tons of pollutants	Measured/forecast emissions include CO, NOX, PM2.5, PM10, SOX, and VOC. CO2 as secondary measure to reflect greenhouse gas emissions.
	Net tons of pollutants (criteria pollutants) and greenhouse gas emissions	Measured/forecast emissions include CO, NOX, PM2.5, PM10, SOX, and VOC. CO2 as secondary measure to reflect greenhouse gas emissions.
<b>Economic Well Being</b>	Additional jobs supported by improving competitiveness	Number of jobs added to the economy as a result of improved transportation conditions which make the Region more competitive
	Additional jobs supported by transportation investment	Total number of jobs supported in the economy as a result of transportation expenditures.
	Net contribution to Gross Regional Product	Gross Regional Product due to transportation investments and increased competitiveness
<b>Investment Effectiveness System Sustainability</b>	Benefit/Cost Ratio	Ratio of monetized user and societal benefits to the agency transportation costs
	Cost per capita to preserve multi-modal system to current and state of good repair	Annual costs per capita required to preserve the multi-modal system to current conditions

Source: SCAG, 2012-2035 RTP/SCS

**TABLE B2 Transit Performance Measurement Categories from TCRP 88**

Category	Description
Availability	Measures how easily potential passengers can use transit for particular types of trips
Service Delivery	Measures that assess passengers day to day experiences using transit
Community/ Transit Impact	Measures of transit's role in meeting passengers day to day experiences using transit
Travel Time	How long it takes to make a trip by transit, by itself, in comparison with another mode, or in comparison with an ideal value
Safety and Security	The likelihood that one will be involved in an accident [safety] or become a victim of a crime [security] while using transit
Maintenance and Construction	The effectiveness of the agency's maintenance and the impacts of transit construction on passengers
Economic	Measures of transit performance from a business perspective
Capacity	The ability of transit facilities to move people and vehicles

Source: TCRP 88: Guide Book for Developing a Transit Performance

**TABLE B3 Performance Measure Data Reported to the National Transit Database**

Operational Measures	Financial Measures
Vehicle Revenue Miles (Passenger Car Revenue Miles for Rail Modes)	Fare Revenues Earned by Mode and Type of Service
Vehicle Revenue Hours (Passenger Car Revenue Hours for Rail Modes)	Operating Expense by Mode and Type of Service
Vehicles Operated in Maximum Service	Operating Expense by Mode and Type of Service for Vehicle Operations
Directional Route Miles (Fixed-Guideway and Mixed-Traffic when Applicable)	Operating Expense by Mode and Type of Service for Vehicle Maintenance
Passenger Miles Travelled	Operating Expense by Mode and Type of Service for Non-Vehicle Maintenance
Unlinked Passenger Trips	Operating Expense by Mode and Type of Service for General Administration
Monthly Operational Measures	Total Capital Expenditure
	Capital Expenditure – Rolling Stock
	Capital Expenditure - Facilities

Source: NTD 2012

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<sup>i</sup> National Highway Cooperative Research Program Report 446: *A Guidebook for Performance Based Transportation Planning*, 2000, page 6

<sup>ii</sup> Transportation Planning Capacity Building Program - USDOT/FHWA/FTA. 2013, *North Dakota Metropolitan Planning Organizations Peer Exchange on Introducing Performance Management into the MPO Planning Process: A TCPB Peer Exchange*

<sup>iii</sup> Transportation Planning Capacity Building Program - USDOT/FHWA/FTA. 2013, *North Dakota Metropolitan Planning Organizations Peer Exchange on Introducing Performance Management into the MPO Planning Process: A TCPB Peer Exchange*

<sup>iv</sup> Federal Highway Administration 2013 *Performance Based Planning and Programming Guidebook*

<sup>v</sup> Caltrans, 2010 *California Regional Transportation Planning Guidelines*, page 177





## APPENDIX C

### Reporting Exceptions

**TABLE C1 Reporting Exceptions**

Reporting Agency	Exceptions
Anaheim Transit	Only report 2008-2012
Beach Cities Transit	Report only from 2008-2012
Culver City Municipal Bus Lines	Demand Response report only 2009-2011
Foothill Transit	No reports 1998-2002
Imperial Valley Transit	Only report 2008-2012
La Mirada Transit	No report from 2006-2008
Metro	Demand Response only reports 1994-1998
Montebello Bus Lines	No report, Demand Response 2010-2011, Demand Response average fleet age 2008-2011
Norwalk Transit System	No report Demand Response 2002-2003
Simi Valley Transit	No reports from 1995-1998, missing some data in 1998 and 2011
Torrance Transit	Demand Response no report 2010-2011

There are many reasons why there might be exceptions to reporting on the part of a transit agency, including data corruptions, results of the auditing process, incorrect reporting, data transfer issues, service

discontinuations, and incomplete reporting. Reporting exceptions that affected the data presented in this report are presented in Table C1.



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